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Structure attributes must be viewed using STN Express query preparation.

L6 617 SEA FILE=REGISTRY SSS FUL L4

L7 35 SEA FILE=CAPLUS L6

=> d 17 1-35 ibib abs hitstr

L7 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:44840 CAPLUS

DOCUMENT NUMBER: 149:556473

TITLE: Study of the cross-recyclization of

4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans with

alkylating reagents

AUTHOR(S): Dyachenko, V. D.

CORPORATE SOURCE: Lugansk. Nats. Pedagog. Univ. im. T. Shevchenko,

Luhansk, 91011, Ukraine

SOURCE: Zhurnal Organichnoi ta Farmatsevtichnoi Khimii (2007),

5(4), 14-18

CODEN: ZOFKAM

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): Natsional'nii Farmatsevtichnii Universitet Journal Russian CASREACT 149:556473

- AB The cross-recyclization of 4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans I [Ar = 4-MeOC6H4, 4-EtOC6H4, 3,4-(MeO)2C6H3, 3-MeO-4-PhCH2OC6H3] with α-bromketones RICOCH2Br (R1 = cyclopropyl, 4-BrC6H4, coumarin-3-yl, etc.) or with chloroacetic acid derivs. R2COCH2C1 (R2 = NH2, PhCH2O) afforded the substituted 3-aryl-2-(thiazol-2-yl)acrylonitriles II and thieno(2,3-b)pyridines III, resp.
 - T 309266-85-1P 361478-09-3P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of [aryl(cyano)vinyl]thiazoles and diamino(cyano)thieno[2,3-b]pyridines via cross-recyclization of aryl(diamino)dicyano-4H-thiopyrans with α-bromoketones, chloroacetamide or chloroacetate)

CN

R¹ II

- RN 309266-85-1 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)-, phenylmethyl ester (CA INDEX NAME)

OMe
$$\begin{array}{c} \text{OMe} \\ \text{NH}_2 \\ \text{NC} \\ \text{NC} \\ \text{NC} \\ \text{N} \\ \text{S} \\ \end{array}$$

361478-09-3 CAPLUS RN CN

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)- (CA INDEX NAME)

ANSWER 2 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1170553 CAPLUS

DOCUMENT NUMBER: 148:23751

TITLE: A novel class of Hsp90 inhibitors isolated by structure-based virtual screening

Park, Hwangseo; Kim, Yun-Jung; Hahn, Ji-Sook AUTHOR(S):

Department of Bioscience and Biotechnology, Sejong CORPORATE SOURCE:

University, 98 Kunja-dong, Gwangjin-gu, Seoul,

143-747, S. Korea Bioorganic & Medicinal Chemistry Letters (2007),

17(22), 6345-6349

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English AB

A novel class of 3-phenyl-2-styryl-3H-quinazolin-4-one Hsp90 inhibitors with in vitro anti-tumor activity are identified by structure-based virtual screening of a chemical database with docking simulations in the N-terminal ATP-binding site, in vitro ATPase assay using yeast Hsp90, and cell-based Her2 degradation assay in a consecutive fashion. These results exemplify the usefulness of the structure-based virtual screening with mol. docking in drug discovery. The structural features responsible for a tight binding of the inhibitors in the active site of Hsp90 are discussed in detail.

959123-12-7

SOURCE:

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(novel class of Hsp90 inhibitors isolated by structure-based virtual screening)

959123-12-7 CAPLUS RN

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-4-(4-methoxyphenyl)-(CA INDEX NAME)

35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:748488 CAPLUS DOCUMENT NUMBER: 148:585768

TITLE: Cross-recyclization of

4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans with alkylation reagents

Dyachenko, V. D.; Ryl'skaya, T. A.; Savchuk, S. V. CORPORATE SOURCE: Kharkov univ., Kharkov, Ukraine

Visnik Kharkivs'kogo Natsional'nogo Universitetu im.

V. N. Karazina (2006), 731, 86-89

CODEN: VKNUAK

PUBLISHER: Kharkivs'kii Natsional'nii Universitet im. V. N.

Karazina DOCUMENT TYPE: Journal LANGUAGE: Russian

CASREACT 148:585768 OTHER SOURCE(S):

CONH2

III

GI

NC

H2N

R1

AUTHOR(S):

SOURCE:

H2N

NH2 ΙV AR Substituted 3-arvl-2-(thiazol-2-vl)acrvlonitriles I (R1 = 4-FC6H4. 4-Me2CHC6H4, 1-naphthyl; R2 = cyclopropyl, Ph, 4-ClC6H4, 2-thienyl, 3-coumarinyl, etc.), pyridinedinitrile II (R1 = 3-ClC6H4) and thieno[2,3-b]pyridine III (R1 = 4-Me2CHC6H4) were synthesized via cross-recyclization of thiopyrans IV with α-bromoketones R2COCH2Br, acetic anhydride or chloroacetamide, resp. The compds. I were also prepared by condensation of the corresponding 2-(cyanomethyl)-4-R2-1,3-thiazoles with aromatic aldehydes R1CHO. TT

476319-10-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of aryl(thiazolyl)acrylonitriles, pyridinedinitrile and thieno[2,3-b]pyridine via cross-recyclization of aryl(diamino)dicyanothiopyrans with α-bromoketones, Ac20 or chloroacetamide)

RM 476319-10-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-5-cvano-4-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)

L7 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:595589 CAPLUS

DOCUMENT NUMBER: 148:495896

TITLE: A novel synthesis of pyridine-2(1H)-thione,

pyrazolo[3,4-b]pyridine,

pyrido[2',3':3,4]pyrazolo[1,5-a]pyrimidine,

thieno[2,3-b]pyridine, and

pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivatives

containing a naphthyl moiety

AUTHOR (S): Abdel Fattah, Azza M.; Elneairy, Mohamed A. A.; Gad-Elkareem, Mohamed A. M.

Chemistry Department, Cairo University, Giza, Egypt

Phosphorus, Sulfur and Silicon and the Related

Elements (2007), 182(6), 1351-1364

CODEN: PSSLEC; ISSN: 1042-6507

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

SOURCE:

OTHER SOURCE(S): CASREACT 148:495896

6-Amino-4-naphthyl-2-thioxo-1,2-dihydropyridine-3,5-dicarbonitriles (I)

were synthesized from naphthaldehydes and cyanothioacetamide. I were used as starting materials for the synthesis of the title compds. All structures of the newly synthesized heterocyclic compds. were established on the basis of IR, 1H NMR, 13C NMR, mass spectra, and elemental analyses.

1021299-99-9P 1021300-00-4P 1021300-01-5P

1021300-02-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyridine-2(1H)-thione, pyrazolo[3,4-b]pyridines, pyrido[2',3':3,4]pyrazolo[1,5-a]pyrimidines, thieno[2,3-b]pyridines,

and pyrido[3',2':4,5]thieno[3,2-d]pyrimidines containing a naphthyl moiety)

RN 1021299-99-9 CAPLUS

CN Thieno[2,3-b]pvridine-2-carboxvlic acid,

3,6-diamino-5-cyano-4-(1-naphthalenyl)-, ethyl ester (CA INDEX NAME)

RN 1021300-00-4 CAPLUS CN Thieno[2,3-b]pyriding

Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(2-naphthalenyl)-, ethyl ester (CA INDEX NAME)

RN 1021300-01-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(1-naphthalenyl)- (CA INDEX NAME)

RN 1021300-02-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(2-naphthaleny1)- (CA INDEX NAME)

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(1-naphthalenyl)-, hydrazide (CA INDEX NAME)

RN 1021300-06-0 CAPLUS CN Thieno(2,3-b)pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(2-naphthalenyl)-, hydrazide (CA INDEX NAME)

RN 1021300-07-1 CAPLUS
CN Thieno[2,3-b]pyridine-5-carbonitrile,
3,6-diamino-2-benzoyl-4-(1-naphthalenyl)- (CA INDEX NAME)

RN 1021300-08-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-(4-chlorobenzoy1)-4-(1-naphthaleny1)- (CA INDEX NAME)

RN 1021300-09-3 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,
3,6-diamino-2-benzoyl-4-(2-naphthalenyl)- (CA INDEX NAME)

RN 1021300-10-6 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,
3,6-diamino-2-(4-chlorobenzoyl)-4-(2-naphthalenyl)- (CA INDEX NAME)

RN 1021300-11-7 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 2-acetyl-3,6-diamino-4-(1-naphthalenyl)- (CA INDEX NAME)

RN 1021300-12-8 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 2-acetyl-3,6-diamino-4-(2-naphthalenyl)- (CA INDEX NAME)

RN 1021300-13-9 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-(1-naphthalenyl)-(CA INDEX NAME)

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:541708 CAPLUS

DOCUMENT NUMBER: 148:426837 TITLE: Reactions

TITLE: Reactions with 3,6-diaminothieno[2,3-b]pyridines: synthesis and characterization of several new fused

pyridine heterocycles
AUTHOR(S): Gad-Elkareem, Mohamed A. M.; Elneairy, Mohamed A. A.;

Taha, Adel M.

CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Al-Azhar University (Assiut Branch), Assiut, 71524, Egypt

SOURCE: Heteroatom Chemistry (2007), 18(4), 405-413

CODEN: HETCE8; ISSN: 1042-7163

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:426837

AB 6-Aminopyridine-2(1H)thiones reacting with α-halo compds. afforded the alkylthiopyridine derivs. which in turn cyclized to thieno[2,3-b]pyridine derivs. (I). Several thieno[2,3-b]pyridine derivs., pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivs., and

pyrido[3',2':4,5]thieno[3,2-c]pyridazine derivs. were prepared starting from I.

IT 299464-98-5P 476319-02-5P 1017623-23-2P 1017623-24-3P 1017623-25-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of new fused pyridine heterocycles via reactions with 3,6-diaminothieno[2,3-b]pyridines)

RN 299464-98-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-5-cyano-4-(4-methoxyphenyl)- (CA INDEX NAME)

- RN 476319-02-5 CAPLUS
- CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-(4-methoxyphenyl)-(CA INDEX NAME)

- RN 1017623-23-2 CAPLUS
- CN Methanimidamide, N'=[2,5-dicyano-3-[[(dimethylamino)methylene]amino]-4-(4-methoxyphenyl)thieno[2,3-b]pyridin-6-yl]-N,N-dimethyl- (CA INDEX NAME)

- RN 1017623-24-3 CAPLUS
- CN Methanimidamide, N'-[2-acetyl-3-amino-5-cyano-4-(4-methoxyphenyl)thieno[2,3-b]pyridin-6-yl]-N,N-dimethyl- (CA INDEX NAME)

- RN 1017623-25-4 CAPLUS
- CN Methanimidamide, N'-[2-acetyl-5-cyano-3-[[(dimethylamino)methylene]amino]-4-(4-methoxyphenyl)thleno[2,3-b]pyridin-6-yl]-N,N-dimethyl- (CA INDEX NAME)

тт 299464-97-4P

> RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of new fused pyridine heterocycles via reactions with 3,6-diaminothieno[2,3-b]pyridines)

299464-97-4 CAPLUS RN

CN Thieno[2,3-b]pyridine-5-carbonitrile, 2-acetvl-3,6-diamino-4-(4-methoxyphenyl)- (CA INDEX NAME)

REFERENCE COUNT:

SOURCE:

THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

29 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:380062 CAPLUS

DOCUMENT NUMBER: 148:403161

TITLE: Pyridopyrimidines, pyrazolopyrimidines,

pyridothienopyrimidines and pyridothienotriazines.

Synthesis and biological activity

Quintela, Jose Maria; Peinador, Carlos AUTHOR(S):

CORPORATE SOURCE: Departamento de Quimica Fundamental, Universidad de A

Coruna, A Coruna, E-15071, Spain

Trends in Heterocyclic Chemistry (2005), 10, 97-114

CODEN: TIHCE6; ISSN: 0972-432X

PUBLISHER: Research Trends

DOCUMENT TYPE: Journal

LANGUAGE: Enalish

OTHER SOURCE(S): CASREACT 148:403161

The synthesis of pyridopyrimidines, pyrazolopyrimidines,

pyridothienopyrimidines, pyridothienotriazines and

pyridodithienoditriazines and their evaluation as inhibitors or inducers of the release of histamine is reported. The activity was measured under immunol. and chemical stimulus with polymer 48/80 and the drugs adryamicin and vinorelbine. The expts. were carried out with and without

preincubation of the stimulus with the cells before addition of the drug. Their antitumor activity have been tested in vitro against standard P-388, A-549, HT-29 and MEL-28 tumor cell lines.

IT 157332-06-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and biol. activity of pyridopyrimidines, pyrazolopyrimidines, pyridothienopyrimidines and pyridothienotriazines)

RN 157332-06-4 CAPLUS CN Thieno(2.3-b)pyridi:

Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)

IT 217954-46-6P 1015790-68-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and biol. activity of pyridopyrimidines, pyrazolopyrimidines, pyridothienopyrimidines and pyridothienotriazines)

RN 217954-46-6 CAPLUS

CN Carbamimidic chloride, N'-(2,5-dicyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3-yl)-N,N-dimethyl- (CA INDEX NAME)

RN 1015790-68-7 CAPLUS

CN Methanimidamide, N'-(2,5-dicyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3v1)-N.N-dimethyl- (CA INDEX NAME)

REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1250604 CAPLUS DOCUMENT NUMBER: 146:27850

TITLE: Preparation of thieno[2,3-b]pyridines as HSP90

modulators

INVENTOR(S): Eggenweiler, Hans-Michael; Wolf, Michael

GI

SOURCE:

PATENT ASSIGNEE(S): Merck Patent GmbH, Germany PCT Int. Appl., 97pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	PATENT NO.											DATE							
WO	O 2006125531						2006	1130											
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		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	MI	, M	R, NE	, SN,	TD,	TG,	BW,	GH,		
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	Z, T	, UG	, ZM,	ZW,	AM,	AZ,	BY,		
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CA	2609	385			A1 20061130					CA	200		20060511						
EP	EP 1888593																		
	R:												, FR,						
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JP	JP 2008542213						2008	1127	JP 2008-512724						20060511				
CN	CN 101163707						A 200804			CN 2006-80013825					20071024				
MX	MX 200714720						2008	0215	MX 2007-14720 IN 2007-KN4835						20071123				
IN	IN 2007KN04835						2008	0215		IN	200	7-KN4	835		2	0071	212		
KR	KR 2008021054						2008	0306		KR	200	7-730	243		_ 2	0071	226		
PRIORIT	PRIORITY APPLN. INFO.:												00502						
OTHER S	OURCE	(S):	MARI	PAT	146:	2785		WO	2000	-EP4	426		w 2	0060	511				
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AB

NHCO(X)s-Q, CONH(X)s-Q, NHCONH(X)s-Q, etc.; X = (un)substituted alkenyl with provisos; s = 0-1; R4 = H, halo, CN, etc.] and their pharmaceutically acceptable salts were prepared For example, N-acylation of amine II with 3-(trifluoromethyl)benzoyl chloride afforded claimed thieno[2,3-b]pyridine III. In HSP90 receptor binding assays, 4-examples of compds. I exhibited IC50 values ranging from 11-1.9x10-6 M. 916164-09-5P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(3-trifluoromethylbenzoylamino)phenyl]thieno[2,3-b]pyridine 916164-10-8P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methoxy-3acetamidophenvl)thieno[2,3-b]pvridine 916164-11-9P, 2-(Aminocarbonvl)-3,6-diamino-5-cvano-4-(4-methoxy-3-(trifluoroacetamido)phenyl)thieno[2,3-b]pyridine 916164-12-0P. 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4methoxycarbonylbutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-13-1P 916164-14-2P, 2-Aminocarbonvl-3,6-diamino-5-cvano-4-[4-methoxv-3-(4-(methoxycarbonyl)benzovlamino)phenyl]thieno[2,3-b]pyridine 916164-15-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-methoxycarbonylmethoxyacetamido)phenyl]thieno[2,3-b]pyridine 916164-16-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(((3-(trifluoromethyl)phenyl)sulfonyl)amino)phenyl]thieno[2,3-b]pyridine 916164-17-5P, 2-Aminocarbonvl-3,6-diamino-5-cvano-4-[4-methoxy-3-(4-carboxybutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-18-6P , 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4carboxybenzoylamino)phenyl]thieno[2,3-b]pyridine 916164-19-7P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2carboxymethoxyacetamido)phenyl]thieno[2,3-b]pyridine 916164-20-0P , 2-Aminocarbony1-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-[(tertbutyloxycarbonyl)amino]acetamido]phenyl]thieno[2,3-b]pyridine 916164-21-1P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[[3-[(tert-butyloxycarbonyl)amino]propionyl]amino]phenyl]thieno[2,3-

Title compds. I [Y = OH, SH, NH2, etc.; R1 = halo, OH, SH, etc.; R2, R3 =

```
b]pvridine 916164-22-2P,
2-Aminocarbonvl-3,6-diamino-5-cvano-4-[4-methoxv-3-[[4-[(tert-
butyloxycarbonyl)aminolbutyryllaminolphenyllthieno[2,3-b]pyridine
916164-23-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-
(indol-7-ylcarbonylamino)phenyl]thieno[2,3-b]pyridine 916164-24-4P
, (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[[2-[(tert-
butvloxvcarbonvl)aminol-3-(1H-imidazol-4-
vl)propionvl]amino|phenvl]thieno[2,3-b]pvridine 916164-25-5P.
(S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[[2-[(tert-
butyloxycarbonyl)amino]-3-aminocarbonylpropionyl]amino]phenyl]thieno[2,3-
b]pyridine 916164-26-6P,
2-Aminocarbonv1-3,6-diamino-5-cvano-4-[4-methoxy-3-[[2-(2-
Carbamovlacetvlamino)acetvl]amino]phenvl]thieno[2,3-b]pyridine
916164-27-7P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-
(indazol-7-ylcarbonylamino)phenyl]thieno[2,3-b]pyridine
916164-28-8P, (S)-2-Aminocarbony1-3,6-diamino-5-cyano-4-[4-methoxy-
3-[[2-[(tert-butyloxycarbonyl)amino]-3-(tert-
butyloxy)propionyl]amino]phenyl]thieno[2,3-b]pyridine 916164-29-9P
, 2-Aminocarbonv1-3,6-diamino-5-cvano-4-[4-methoxv-3-(3-
aminopropionvlamino) phenvllthieno[2,3-b]pvridine 916164-32-4P.
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-
aminobutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-33-5P,
(S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[[2-amino-3-(1H-
imidazol-4-yl)propionyl]amino]phenyl]thieno[2,3-b]pyridine
916164-34-6P, (S)-2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-
3-([2-amino-3-aminocarbonylpropionyl]amino)phenyl]thieno[2,3-b]pyridine
916164-35-7P, (S)-2-Aminocarbonvl-3,6-diamino-5-cvano-4-[4-methoxy-
3-(2-amino-3-hydroxypropionylamino)phenyllthieno[2,3-b]pyridine
916164-36-8P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-
(3-(3-(trifluoromethyl)phenyl)ureido)phenyl]thieno[2,3-b]pyridine
916164-37-9P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methoxy-2-
benzoylaminophenyl)thieno[2,3-b]pyridine 916164-38-0P,
2-Aminocarbonvl-3,6-diamino-5-cvano-4-[4-methoxv-2-(3-
carbamoylpropionylamino)phenyl]thieno[2,3-b]pyridine 916164-39-1P
, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-[[2-
(phenylsulfonyl)acetyl]amino]phenyl]thieno[2,3-b]pyridine
916164-40-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-2-
[(2-(3-ethylureido)ethyl)carbamoyl]phenyl]thieno[2,3-b]pyridine
916164-41-5P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(indazol-7-
vlcarbamovl)phenvllthieno[2,3-b]pvridine 916164-42-6P.
2-Aminocarbonvl-3,6-diamino-5-cvano-4-[5-chloro-3-(3-
carbamoylpropylcarbamoyl)phenyl]thieno[2,3-b]pyridine 916164-43-7P
, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(3-
fluorobenzyl)phenyl]thieno[2,3-b]pyridine 916164-44-8P,
2-Aminocarbonyl-3,6-diamino-5-cvano-4-[3-chloro-4-methoxy-2-[2-(pyridin-2-
v1)ethv1]phenv1]thieno[2,3-b]pvridine 916164-45-9P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-
carboxyethyl)phenyl]thieno[2,3-b]pyridine 916164-46-0P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-[2-(4-methylpiperazin-1-
v1)ethoxy]phenv1]thieno[2,3-b]pyridine 916164-47-1P,
2-Aminocarbonv1-3,6-diamino-5-cvano-4-[4-methoxy-3-[3-(2-
aminoacetylamino)phenyl]phenyl]thieno[2,3-b]pyridine 916164-48-2P
, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-chloro-2-(4-
methoxycarbonylbutyrylamino)phenyl]thieno[2,3-b]pyridine
916164-49-3P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-
chloro-2-(4-carboxybutyrylamino)phenyl]thieno[2,3-b]pyridine
916164-50-6P 916164-51-7P,
2-((2-(Morpholin-4-yl)ethyl)carbamoyl)-3,6-diamino-5-cyano-4-[2-(4-
carboxybutyrylamino)phenyl]thieno[2,3-b]pyridine 916164-52-8P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[2-
```

(benzyloxycarbonylamino)phenyl|thieno[2,3-b]pyridine 916164-53-9P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(4-trifluoromethylbenzoylamino)phenyl|thieno[2,3-b]pyridine 916164-54-0P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(2-trifluoromethylbenzoylamino)phenyl|thieno[2,3-b]pyridine

916164-55-1P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-[4-methoxy-3-(pyridin-4-ylcarbonylamino)phenyl]thieno[2,3-b]pyridine 916164-56-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thieno[2,3-b]pyridines as HSP90 modulators)

RN 916164-09-5 CAPLUS CN Thieno(2.3-b)pyriding

Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-5-cyano-4-[4-methoxy-3-[[3-(trifluoromethyl)benzoyl]amino]phenyl]- (CA INDEX NAME)

RN 916164-10-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,

4-[3-(acetylamino)-4-methoxyphenyl]-3,6-diamino-5-cyano- (CA INDEX NAME)

RN 916164-11-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[(2,2,2-trifluoroacety1)amino]pheny1]-(CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{F}_3\text{C}-\text{C}-\text{NH} \\ \text{NC} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array}$$

RN 916164-12-0 CAPLUS
CN Pentanoic acid, 5-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-5-oxo-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \begin{picture}(20,0) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,0$$

RN 916164-13-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(1,2-dihydro-2-oxo-4-pyridinyl)carbonyl]amino]-4-methoxyphenyl]- (CA INDEX NAME)

RN 916164-14-2 CAPLUS

CN Benzoic acid, 4-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]carbonyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-C} \\ \text{O} \\ \text{C-NH} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array} \begin{array}{c} \text{OMe} \\ \text{O} \\ \text{NH}_2 \\ \text{C-NH}_2 \\ \text{C-NH}_$$

RN 916164-15-3 CAPLUS

CN Acetic acid, 2-[2-[[5-[3,6-diamino-2-(aminocarbony1)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-2-oxoethoxy]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{MeO-C-CH}_2\text{-O-CH}_2\text{-C-NH} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array}$$

RN 916164-16-4 CAPLUS

CN

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[[[3-(trifluoromethyl)phenyl]sulfonyl]amino]phenyl]- (CA INDEX NAME)

RN 916164-17-5 CAPLUS

CN Pentanoic acid, 5-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-5-oxo- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{NO2C-} (\text{CH}_2) \, 3 - \text{C-NH} \\ \text{NC} \\ \text{H}_2 \text{N} \\ \text{N} \end{array}$$

RN 916164-18-6 CAPLUS

CN Benzoic acid, 4-[[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]carbonyl]- (CA INDEX NAME)

RN 916164-19-7 CAPLUS

CN Acetic acid, 2-[2-[[5-[3,6-diamino-2-(aminocarbony1)-5-cyanothieno[2,3-b]pyridin-4-y1]-2-methoxypheny1]amino]-2-oxoethoxy]- (CA INDEX NAME)

RN 916164-20-0 CAPLUS

CN Carbamic acid, N-[2-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c} \bullet \\ \text{t-BuO-C-NH-CH}_2\text{-C-NH} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array} \begin{array}{c} \bullet \\ \text{NH}_2 \\ \text{C-NH}_2 \\ \end{array}$$

- RN 916164-21-1 CAPLUS
- CN Carbamic acid, N-[3-[[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b)pyridin-4-yl]-2-methoxyphenyl]amino]-3-oxopropyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 916164-22-2 CAPLUS
- CN Carbamic acid, N-[4-[15-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-4-oxobutyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

- RN 916164-23-3 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(lH-indol-7-ylcarbonyl)amino]-4-methoxyphenyl]-(CA INDEX NAME)

- RN 916164-24-4 CAPLUS
- CN Carbamic acid, N=[(15]-2-[[5-[3,6-diamino-2-(aminocarbonyl)-5cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]-1-[(H-imidazol-5ylmethyl)-2-oxoethyl]-, l,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN 916164-25-5 CAPLUS
- CN Carbamic acid, N-[(1S)-3-amino-1-[[[5-[3,6-diamino-2-(aminocarbony1)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]amino]carbonyl]-3-oxopropyl]-,1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 916164-26-6 CAPLUS

 $\begin{tabular}{ll} CN & Propanediamide, $N1-[2-[[5-[3,6-diamino-2-(aminocarbony1)-5-cyanothieno[2,3-b]pyridin-4-y1]-2-methoxyphenyl]amino]-2-oxoethyl]- & (CA INDEX NAME) \\ \end{tabular}$

$$\begin{array}{c} 0 \\ \text{H}_2\text{N}-\text{C}-\text{CH}_2-\text{C}-\text{NH}-\text{CH}_2-\text{C}-\text{NH} \\ \\ \text{NC} \\ \text{H}_2\text{N} \\ \end{array} \begin{array}{c} 0 \\ \text{OMe} \\ \\ \text{NH}_2 \\ \\ \text{S} \\ \end{array}$$

RN 916164-27-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-[3-[(1H-indazol-7-ylcarbonyl)amino]-4-methoxyphenyl](CA INDEX NAME)

RN 916164-28-8 CAPLUS

CN Carbamic acid, N-[(18)-2-[[5-[3,6-diamino-2-(aminocarbony])-5cyanothieno[2,3-b]pyridin-4-y1]-2-methoxyphenyl]amino]-1-[(1,1dimethylethoxy)methyl]-2-oxoethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 916164-29-9 CAPLUS

CN

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3-[(3-amino-1-oxopropyl)amino]-4-methoxyphenyl]-5-cyano-(CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{C-NH} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array}$$

RN 916164-32-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
 3,6-diamino-4-[3-[(4-amino-1-oxobutyl)amino]-4-methoxyphenyl]-5-cyano(CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{OMe} \\ \text{H}_2\text{N}-\text{(CH}_2)_3-\text{C}-\text{NH} \\ \text{NC} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array}$$

RN 916164-33-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-dlamino-4-[3-[(25)-2-amino-3-(1H-imidazol-5-yl)-1-oxopropyl]amino]-4-methoxyphenyl]-5-cyano- (CA INDEX NAME)

Absolute stereochemistry.

RN 916164-34-6 CAPLUS

CN Butanediamide, 2-amino-N1-[5-[3,6-diamino-2-(aminocarbonyl)-5cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenyl]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 916164-35-7 CAPLUS CN Thieno[2,3-b]pyridi:

Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-4-[3-[[(2\$)-2-amino-3-hydroxy-1-oxopropy1]amino]-4methoxypheny1]-5-cyano- (CA INDEX NAME)

Absolute stereochemistry.

RN 916164-36-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-2-[[[[3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{O} \\ \text{NH-C-NH} \\ \text{NC} \\ \text{H}_2 \\ \text{N} \\ \text{N} \\ \text{S} \end{array}$$

RN 916164-37-9 CAPLUS CN Thieno[2,3-b]pyridin

Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-4-[2-(benzoylamino)-4-methoxyphenyl]-5-cyano- (CA INDEX NAME)

RN 916164-38-0 CAPLUS

CN Butanediamide, N1-[2-[3,6-diamino-2-(aminocarbony1)-5-cyanothieno[2,3-b]pyridin-4-y1]-5-methoxypheny1]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{OMe} \\ \text{H}_2\text{N} - \text{C} - \text{CH}_2 - \text{CH}_2 - \text{C} - \text{NH} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array} \begin{array}{c} \text{OMe} \\ \text{NH}_2 \\ \text{C} - \text{NH}_2 \\ \text{S} \end{array}$$

RN 916164-39-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-2-[[2-(phenylsulfonyl)acetyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{Ph-} \\ \text{S-} \\ \text{CH}_2 \\ \text{C-} \\ \text{NH} \\ \text{NH}_2 \\ \text{NH}_2 \\ \text{C-} \\ \text{NH}_2 \\$$

RN 916164-40-4 CAPLUS CN Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-5-cyano-4-[2-[[[2-

[[(ethylamino)carbonyl]amino]ethyl]amino]carbonyl]-4-methoxyphenyl]- (CA INDEX NAME)

RN 916164-41-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(1H-indazol-7-ylamino)carbonyl]phenyl]- (CA INDEX NAME)

RN 916164-42-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3-[(4-amino-4-oxobuty1)amino]carbony1]-5-chloropheny1]-5cyano- (CA INDEX NAME)

RN 916164-43-7 CAPLUS CN Thieno[2,3-b]pyridi

N Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(3-fluorophenyl)methyl]-4-methoxyphenyl]- (CA INDEX NAME)

RN 916164-44-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3-chloro-4-methoxy-2-[2-(2-pyridiny1)ethy1]pheny1]-5-cyano-(CA INDEX NAME)

RN 916164-45-9 CAPLUS

CN Benzenepropanoic acid, 5-[3,6-diamino-2-(aminocarbony1)-5-cyanothieno[2,3-b]pyridin-4-y1]-2-methoxy- (CA INDEX NAME)

RN 916164-46-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[2-(4-methyl-1-piperazinyl)ethoxy]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{NN} \\ \text{NC} \\ \text{NC} \\ \text{H}_2 \\ \text{NN} \\ \text{S} \end{array}$$

RN 916164-47-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-4-[3'*-[(2-aminoacetyl)amino]-6-methoxy[1,1'-biphenyl]-3-yl]-5cyano (CA INDEX NAME)

$$\begin{array}{c} \mathsf{O} \\ \mathsf{N} \\ \mathsf{H}_2 \mathsf{N} - \mathsf{C} \\ \mathsf{H}_2 \\ \mathsf{N} \\ \mathsf{C} \\ \mathsf{N} \\$$

RN 916164-48-2 CAPLUS

Pentanoic acid, 5-[[2-chloro-6-[3,6-diamino-2-(aminocarbonyl)-5cyanothieno[2,3-b]pyridin-4-yl]-3-methoxyphenyl]amino]-5-oxo-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{C1} \\ \text{MeO-C-} \text{ (CH2)}_{3} - \text{C-NH} \\ \text{NC} \\ \text{H}_{2} \text{N} \\ \text{N} \\ \end{array} \begin{array}{c} \text{OMe} \\ \text{C} - \text{NH}_{2} \\ \text{C} - \text{NH}_{2} \\ \text{N} \end{array}$$

RN 916164-49-3 CAPLUS

$$\begin{array}{c} \text{OMe} \\ \text{C1} \\ \text{HO}_2\text{C}-\text{(CH}_2)_3-\text{C}-\text{NH} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array} \begin{array}{c} \text{NH}_2 \\ \text{C}-\text{NH}_2 \\ \end{array}$$

RN 916164-50-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-4-[2-chloro-4-(difluoromethoxy)-3-[[3-(4-methyl-1-piperazinyl)1-oxopropyl]amino[phenyl]-5-cyano (CA INDEX NAME)

RN 916164-51-7 CAPLUS

CN Pentanoic acid, 5-[[2-[3,6-diamino-5-cyano-2-[[[2-(4-morpholinyl)ethyl]amino]carbonyl]thieno[2,3-b]pyridin-4-yl]phenyl]amino]-5-oxo- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 916164-52-8 CAPLUS

CN Carbamic acid, N-[2-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]phenyl]-, phenylmethyl ester (CA INDEX NAME)

RN 916164-53-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[[4-(trifluoromethyl)benzoyl]amino]phenyl]- (CA INDEX NAME)

RN 916164-54-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[[2-(trifluoromethyl)benzoyl]amino]phenyl]- (CA INDEX NAME)

RN 916164-55-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[(4-pyridinylcarbonyl)amino]phenyl]-(CA INDEX NAME)

RN 916164-56-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[(2-methyl-1-oxopropyl)amino]phenyl]-(CA INDEX NAME)

II 916164-58-4P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methoxy-3-nitrophenyl)thieno[2,3-b]pyridine 916164-59-5P, 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-amino-4-methoxyphenyl)thieno[2,3-b)pyridine Ri: RCI (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACI (Reactant or reagent) (preparation of thieno[2,3-b]pyridines as HSP90 modulators)

3,6-diamino-5-cyano-4-(4-methoxy-3-nitrophenyl)- (CA INDEX NAME)

(preparation of thieno[2,3-b]pyridines as HSP90 modulators)
RN 916164-58-4 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,

RN 916164-59-5 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-4-(3-amino-4-methoxyphenyl)-5-cyano- (CA INDEX NAME)

L7 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1226146 CAPLUS

DOCUMENT NUMBER: 146:13164

TITLE: Nitrogen-containing heterocyclic compounds as

inhibitors of B-Raf kinase

INVENTOR(S): Gahman, Timothy C.; Lang, Hengyuan; Davis, Robert L.;

Scranton, Shawn A.
PATENT ASSIGNEE(S): Kalypsys, Inc., USA

SOURCE: PCT Int. Appl., 114pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE						DATE								
	WO				A2 200			1123	WO 2006-US18885						20060511					
		W:	CN,	co,	CR,	CU,	CZ,	AU, DE, ID,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
			ΚΖ, MZ,	LC, NA,	LK, NG,	LR, NI,	LS, NO,	LT, NZ, TJ,	LU, OM,	LV, PG,	LY, PH,	MA, PL,	MD, PT,	MG, RO,	MK, RU,	MN, SC,	MW, SD,	MX, SE,		
		RW:	VN, AT,	YU, BE,	ZA, BG,	ZM, CH,	ZW CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
			CF, GM,	CG, KE,	CI, LS,	CM, MW,	GA, MZ,	GN, NA,	GQ, SD,	GW, SL,	ML, SZ,	MR, TZ,	NE,	SN,	TD,	TG,	BW,	GH,		
PRIOR	RIORITY APPLN. INFO.:					KU,	10,	111,	TM, AP, EA, EP, OA US 2005-680288P US 2005-680290P							P 20050512 P 20050512				
									US 2005-68029: US 2005-68029: US 2005-68029:					92P 93P	1					
	US 2005-680294P										94P	1	P 20050512							

OTHER SOURCE(S):

MARPAT 146:13164

AB The present invention relates to compds. and methods useful as inhibitors of B-Raf for the treatment or prevention of cancer, including hematol. and non-hematol. malignancies, hematopoiesis, autoimmune diseases, dermatol. and ophthalmol. conditions.

US 2005-680327P P 20050512

IT 331984-47-5

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (introgen-containing heterocyclic compds. as inhibitors of B-Raf kinase)

RN 331984-47-5 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-phenyl- (CA INDEX NAME)

L7 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:912926 CAPLUS

DOCUMENT NUMBER: 145:292880

Preparation of thienopyridines as heat shock protein TITLE:

HSP-90 modulators

INVENTOR(S): Eggenweiler, Hans-Michael; Wolf, Michael

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany Patent

German

SOURCE: Ger. Offen., 80pp. CODEN: GWXXBX

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

										LICAT	DATE								
	DE 102005009440					A1		2006				2005-			0050	302			
	AU 2006220095					A1 20060908				AU 2	2006-		20060210						
	CA	CA 2599826					A1 20060908				CA :	2006-		2	0060	210			
	WO	WO 2006092202					A1 200				WO :	2006-1	EP11	78		2	20060210		
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	, EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS.	, JP,	KE,	KG,	KM,	KN,	KP,	KR,	
			KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY	, MA,	MD,	MG,	MK,	MN,	MW,	MX,	
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH	, PL,	PT,	RO,	RU,	SC,	SD,	SE,	
			SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR.	, TT,	TZ,	UA,	UG,	US,	UZ,	VC,	
			VN.	YU,	ZA,	ZM,	ZW												
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	, ES,	FI,	FR,	GB,	GR,	HU,	IE,	
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT.	, RO,	SE,	SI,	SK,	TR,	BF,	BJ,	
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	, MR,	NE,	SN,	TD,	TG,	BW,	GH,	
			GM,	KE.	LS,	MW.	MZ.	NA.	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW.	AM,	AZ,	BY,	
			KG,	KZ,	MD,	RU,	TJ,	TM											
	EP 1853609					A1 20071114					EP :	2006-		20060210					
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	HU,	IE,	
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR		
	JP 2008531611										JP :	2007-		2	0060	210			
	MX 200710562						A 20071004				MX :	2007-		20070829					
	CN 101133063						A 20080227				CN :	2006-		2	20070830				
	KR 2007107092							2007	1106		KR 2	2007-		2	0070	831			
	IN 2007KN03649							2008	0530		IN 2	2007-		2	0070	927			
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											WO 2	2006-1	1	7 2	0060	210			
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OTHER SOURCE(S): CASREACT 145:292880; MARPAT 145:292880

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- AB Title compds. I [Y = OH, SH, NH2, etc.; R1 = halo, OH, SH, etc.; R2 = H, halo, etc.; R3 = H, halo, CN, etc.] and their pharmaceutically acceptable salts and formulations were prepared For example, condensation-cyclization of chloroacetamide and thioxopyridine II afforded claimed thienopyridine III. Compds. I are claimed to be modulators of shock protein HSP-90 (no data provided). 309291-64-3P, 2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3,4-
- - dimethoxyphenyl)thieno[2,3-b]pyridine 328109-88-2P,
 - 2-Ethoxycarbonyl-3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)thieno[2,3b]pvridine 331984-46-4P,
 - 2-Aminocarbonvl-3,6-diamino-5-cvano-4-phenvlthieno(2,3-b)pvridine
 - 351166-68-2P, 2-Aminocarbonyl-3,6-diamino-5-cvano-4-(3,4,5-
 - trimethoxyphenyl)thieno[2,3-b]pyridine 361478-09-3P,
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)thieno[2,3-
 - b]pyridine 383156-16-9P,
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-chlorophenyl)thieno[2,3-
 - blpvridine 908590-80-7P,

 - 2-Aminocarbonvl-3,6-diamino-5-cvano-4-(2,4-dimethoxyphenvl)thieno(2,3blpvridine 908590-81-8P.

 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,5-dimethoxyphenyl)thieno[2,3b]pyridine 908590-82-9P,
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,3-dimethoxyphenyl)thieno[2,3-
 - blpvridine 908590-83-0P,

 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-
 - methoxyphenyl)thieno[2,3-b]pyridine 908590-84-1P,
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,4,5-trimethoxyphenyl)thieno[2,3b]pyridine 908590-85-2P,
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,3,4-trimethoxyphenyl)thieno[2,3blpvridine 908590-86-3P,
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxyphenyl)thieno[2,3blpvridine 908590-87-4P.
 - 2-Aminocarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-

RN

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NAME)

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trifluoromethoxyphenyl)thieno[2,3-b]pyridine 908590-88-5P,
2-Aminocarbonv1-3,6-diamino-5-cvano-4-(3-hvdroxv-4-
methylsulfanylphenyl)thieno[2,3-b]pyridine 908590-89-6P,
2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hvdroxv-4-
methoxyphenyl)thieno[2,3-b]pyridine 908590-90-9P,
2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-
hydroxyphenyl)thieno[2,3-b]pyridine 908590-91-0P,
2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hydroxy-4-
trifluoromethoxyphenyl)thieno[2,3-b]pyridine 908590-92-1P,
2-(N-Methylaminocarbonyl)-3,6-diamino-5-cyano-4-(3-hydroxy-4-
methylsulfanylphenyl)thieno[2,3-b]pyridine 908590-93-2P,
2-Aminocarbonvl-3,6-diamino-5-cvano-4-(3-hydroxy-4,5-
dimethoxyphenyl)thieno[2,3-b]pyridine 908590-94-3P,
2-Aminocarbonvl-3,6-diamino-5-cvano-4-(2-bromo-5-hydroxyphenyl)thieno[2,3-
b]pyridine 908590-95-4P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-difluoromethoxy-3-
hydroxyphenyl)thieno[2,3-b]pyridine 908590-96-5P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-(4-methyl-3-hydroxyphenyl)thieno[2,3-
b]pvridine 908590-97-6P 908590-98-7P,
2-Aminocarbonvl-3,6-diamino-5-cvano-4-[3-(4-(ethoxycarbonvl)butoxy)-4-
methoxyphenyl]thieno[2,3-b]pyridine 908590-99-8P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(4-(carboxy)butoxy)-4-
methoxyphenyl]thieno[2,3-b]pyridine 908591-00-4P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(5-(carboxy)pentoxy)-4-
methoxyphenyl|thieno[2,3-b|pyridine 908591-01-5P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(3-(ethoxycarbonyl)propoxy)-4-
methoxyphenyl]thieno[2,3-b]pyridine 908591-02-6P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-[3-(3-(carboxy)propoxy)-4-
methoxyphenyl]thieno[2,3-b]pyridine 908591-03-7P,
2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-
methoxyphenyl)thieno[2,3-b]pyridine 908591-04-8P,
2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxyphenyl)thieno[2,3-
b)pvridine 908591-05-9P,
2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-
trifluoromethoxyphenyl)thieno[2,3-b]pyridine 908591-06-0P,
2-Methoxycarbonyl-3,6-diamino-5-cyano-4-(3-hydroxy-4-
methylsulfanylphenyl)thieno[2,3-b]pyridine 908591-07-1P
908591-08-2P 908591-09-3P 908591-10-6P
908591-11-7P 908591-12-8P 908591-13-9P
908591-14-0P 908591-15-1P 908591-16-2P
908591-17-3P 908591-18-4P 908591-19-5P
908591-20-8P 908591-21-9P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2-methoxyphenyl)thieno[2,3-
b]pvridine 908591-22-0P,
2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2,4-dichlorophenyl)thieno[2,3-
blpvridine 908591-23-1P.
2-Aminocarbonv1-3,6-diamino-5-cyano-4-(3-chlorophenyl)thieno[2,3-
blpvridine 908591-24-2P.
2-Aminocarbonyl-3,6-diamino-5-cyano-4-(2-chlorophenyl)thieno[2,3-
b]pyridine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of thienopyridines as heat shock protein HSP-90 modulators)
309291-64-3 CAPLUS
Thieno[2,3-b]pyridine-2-carboxylic acid,
3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)-, methyl ester (CA INDEX
```

RN 328109-88-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)-, ethyl ester (CA INDEX NAME)

RN 331984-46-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-phenyl- (CA INDEX NAME)

$$H_2N$$
 N S $C-NH_2$ NH_2

RN 351166-68-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 361478-09-3 CAPLUS CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)- (CA INDEX NAME)

RN 383156-16-9 CAPLUS CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)

RN 908590-80-7 CAPLUS
CN Thieno(2,3-b)pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(2,4-dimethoxyphenyl)- (CA INDEX NAME)

RN 908590-81-8 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(2,5-dimethoxyphenyl)- (CA INDEX NAME)

RN 908590-82-9 CAPLUS CN Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-5-cyano-4-(2,3-dimethoxyphenyl)- (CA INDEX NAME)

RN 908590-83-0 CAPLUS

CN

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)- (CA INDEX NAME)

RN 908590-84-1 CAPLUS
CN Thieno(2,3-b)pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(2,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 908590-85-2 CAPLUS CN Thieno[2,3-b]pyriding

Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(2,3,4-trimethoxyphenyl)- (CA INDEX NAME)

RN 908590-86-3 CAPLUS CN Thieno[2,3-b]pyridin

Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(3-hydroxyphenyl)- (CA INDEX NAME)

RN 908590-87-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-hydroxy-4-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

RN 908590-88-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-hydroxy-4-(methylthio)phenyl]- (CA INDEX NAME)

RN 908590-89-6 CAPLUS

CN

Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)-N-methyl- (CA INDEX NAME)

RN 908590-90-9 CAPLUS CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3-hydroxyphenyl)-N-methyl- (CA INDEX NAME)

RN 908590-91-0 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-[3-hydroxy-4-(trifluoromethoxy)phenyl]-N-methyl(CA INDEX NAME)

RN 908590-92-1 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-[3-hydroxy-4-(methylthio)phenyl]-N-methyl- (CA
INDEX NAME)

RN 908590-93-2 CAPLUS
CN Thieno[2,3-b]pyriddine-2-carboxamide,
3,6-diamino-5-cyano-4-(3-hydroxy-4,5-dimethoxypheny1)- (CA INDEX NAME)

RN 908590-94-3 CAPLUS

CN

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(2-bromo-5-hydroxyphenyl)-5-cyano- (CA INDEX NAME)

RN 908590-95-4 CAPLUS CN Thieno[2,3-b]pyridi

Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-[4-(difluoromethoxy)-3-hydroxyphenyl]- (CA INDEX NAME)

RN 908590-96-5 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(3-hydroxy-4-methylphenyl)- (CA INDEX NAME)

RN 908590-97-6 CAPLUS

CN Hexanoic acid, 6-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]-, ethyl ester (CA INDEX NAME)

RN 908590-98-7 CAPLUS

CN Pentanoic acid, 5-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{EtO-C-} \left(\text{CH}_2\right)_4 - \text{O} \\ \text{NC} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array} \begin{array}{c} \text{OMe} \\ \text{C-NH}_2 \\ \text{C-NH}_2 \end{array}$$

RN 908590-99-8 CAPLUS
CN Pentanoic acid, 5-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-bjpyridin-4-yl]-2-methoxyphenoxy]- (CA INDEX NAME)

- RN 908591-00-4 CAPLUS
- CN Hexanoic acid, 6-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]- (CA INDEX NAME)

- RN 908591-01-5 CAPLUS
- CN Butanoic acid, 4-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{EtO-C-} \text{(CH}_2)_3 - \text{O} \\ \text{NC} \\ \text{NC} \\ \text{H}_2 \text{N} \\ \text{N} \\ \text{S} \end{array}$$

RN 908591-02-6 CAPLUS

CN Butanoic acid, 4-[5-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-2-methoxyphenoxy]- (CA INDEX NAME)

RN 908591-03-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(3-hydroxy-4-methoxyphenyl)-, methyl ester (CA INDEX NAME)

RN 908591-04-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-(3-hydroxyphenyl)-, methyl ester (CA INDEX NAME)

RN 908591-05-9 CAPLUS
Thieno[2,3-b]pyridine-2-carboxylic acid,
3,6-diamino-5-cyano-4-[3-hydroxy-4-(trifluoromethoxy)phenyl]-, methyl
ester (CA INDEX NAME)

RN 908591-06-0 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxylic acid,
3,6-diamino-5-cyano-4-[3-hydroxy-4-(methylthio)phenyl]-, methyl ester (CA INDEX NAME)

RN 908591-07-1 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
 3,6-diamino-5-cyano-4-[4-methoxy-3-(phenylmethoxy)phenyl]- (CA INDEX NAME)

RN 908591-08-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[(2-methylphenyl)methoxy]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OMe} \\ & \text{CH}_2\text{-O} \\ & \text{Me} \\ & \text{NC} \\ & \text{H}_2\text{N} \\ & \text{N} \end{array}$$

RN 908591-09-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[(3-methylphenyl)methoxy]phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{Me} \\ \text{CH}_2 - \text{O} \\ \text{NC} \\ \text{H}_2 \text{N} \\ \text{N} \\ \text{S} \end{array}$$

RN 908591-10-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[(4-methylphenyl)methoxy]phenyl]- (CA INDEX NAME)

RN 908591-11-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(2-fluorophenyl)methoxy]-4-methoxyphenyl]- (CA INDEX NAME)

RN 908591-12-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(3-fluorophenyl)methoxy]-4-methoxyphenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{CH}_2-\text{O} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array} \begin{array}{c} \text{O} \\ \text{C}-\text{NH}_2 \\ \text{S} \end{array}$$

RN 908591-13-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[3-[(4-fluorophenyl)methoxy]-4-methoxyphenyl]- (CA INDEX NAME)

RN 908591-14-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3-[(2-chlorophenyl)methoxy]-4-methoxyphenyl]-5-cyano- (CA INDEX NAME)

RN 908591-15-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3-[(3-chloropheny1)methoxy]-4-methoxypheny1]-5-cyano- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{C1} \\ \text{CH}_2 - \text{O} \\ \text{NC} \\ \text{H}_2 \text{N} \\ \text{N} \end{array} \begin{array}{c} \text{O} \\ \text{C} - \text{NH}_2 \\ \text{S} \end{array}$$

RN 908591-16-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-[3-[(4-chloropheny1)methoxy]-4-methoxypheny1]-5-cyano- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{C1} \\ \text{NC} \\ \text{H}_2 \\ \text{N} \end{array} \begin{array}{c} \text{O} \\ \text{NH}_2 \\ \text{S} \end{array}$$

RN 908591-17-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-dlamino-5-cyano-4-[4-methoxy-3-[[2-(trifluoromethyl)phenyl]methoxy]phenyl]- (CA INDEX NAME)

RN 908591-18-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-[[3-(trifluoromethyl)phenyl]methoxy]phenyl]- (CA INDEX NAME)

RN 908591-19-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-dlamino-5-cyano-4-[4-methoxy-3-[[4(trifluoromethyl)phenyl]methoxylphenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \text{CH}_2\text{--}\text{O} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \\ \text{N} \\ \end{array}$$

RN 908591-20-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-methoxy-3-(2-phenylethoxy)phenyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{Ph-CH}_2\text{-CH}_2\text{-O} \\ \text{NC} \\ \text{NC} \\ \text{H}_2\text{N} \\ \text{N} \end{array}$$

RN 908591-21-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(2-methoxyphenyl)- (CA INDEX NAME)

RN 908591-22-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(2,4-dichlorophenyl)- (CA INDEX NAME)

RM 908591-23-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(3-chlorophenyl)-5-cyano- (CA INDEX NAME)

RN 908591-24-2 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(2-chlorophenyl)-5-cyano- (CA INDEX NAME)

L7 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:1273640 CAPLUS

DOCUMENT NUMBER: 144:63952

TITLE: New class of competitive inhibitor of bacterial histidine kinases

Gilmour, Raymond; Foster, J. Estelle; Sheng, Qin; AUTHOR(S):

McClain, Jonathan R.; Riley, Anna; Sun, Pei-Ming; Ng, Wai-Leung; Yan, Dalai; Nicas, Thalia I.; Henry, Kenneth; Winkler, Malcolm E.

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Eli Lilly and Company, Indianapolis, IN, 46285, USA SOURCE: Journal of Bacteriology (2005), 187(23), 8196-8200 CODEN: JOBAAY; ISSN: 0021-9193

PUBLISHER: American Society for Microbiology DOCUMENT TYPE: Journal LANGUAGE: English

Bacterial histidine kinases have been proposed as targets for the discovery of new antibiotics, yet few specific inhibitors of bacterial histidine kinases have been reported. We report here a novel thienopyridine (TEP) compound that inhibits bacterial histidine kinases competitively with respect to ATP but does not comparably inhibit mammalian serine/threonine kinases. Although it partitions into membranes and does not inhibit the growth of bacterial or mammalian cells. TEP could serve as a starting compound for a new class of histidine kinase inhibitors with antibacterial activity.

ΤТ 332175-01-6

CN

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thienopyridine compound is new class of competitive inhibitor of

bacterial histidin kinase autophosphorylation) RN 332175-01-6 CAPLUS

Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-N-(4-bromophenyl)-5-cvano-4-phenyl- (CA INDEX NAME)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:567123 CAPLUS DOCUMENT NUMBER: 143:97338

TITLE: Preparation of

3-amino-5-cyanothieno[2,3-b]pyridine-2-carboxamides as IKK2 inhibitors for the treatment of HBV infection

INVENTOR(S): Chen, Huanming; Zhang, Weijian; Tam, Robert; Raney,

Anneke K. PATENT ASSIGNEE(S): Ribapharm, Inc., USA

SOURCE: PCT Int. Appl., 45 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND		DATE		APPLICATION NO.					DATE			
				been been been b	_		-									
WO 2005058315			A1 20050630			WO 2004-US41632						20041213				
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,

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AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PL, RO, SE, SI, SK, IR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO:

US 2003-529160F P 20031212
```

OTHER SOURCE(S):

CASREACT 143:97338; MARPAT 143:97338

AB Title compds. I [wherein R = (un)substituted heterocycle, alkyl; Rl, R2 = H, alkyl, arylamino; etc., with some limitations] were prepared as IKK2 inhibitors. For instance, piperidine-catalyzed cyclization of furan-2-carboxaldehyde, malononitrile and 2-cyanothioacetamide gave thiol II (67% yield), which underwent S-alkylation with 2-bromoacetamide (68% yield) followed by KOBt-mediated intramol. cyclization to afford I (R = furan-2-yl, Rl = R2 = H) (62% yield). This product showed activity in the IKK2 inhibition assay (ICSO > 10 µM) and HBV screening assay (ECSO = 1-10 µM). Therefore, the invented compds. and their pharmaceutical compns. are useful for treating Hepatitis B infection and other diseases.

compns. are useful for treating Hepatitis B infection and other diseas: 383156-16-9P, 3,6-Diamino-4-(4-chlorophenyl)-5-cyanothieno[2,3-b)pvridine-2-carboxamide 856175-14-9P,

3,6-Diamino-5-cyano-4-(3,4-dihydroxyphenyl)thieno[2,3-b]pyridine-2-carboxamide 856175-16-1P,

3,6-Diamino-5-cyano-4-(3,5-dimethoxyphenyl)thieno[2,3-b]pyridine-2-carboxamide 856175-17-2P,

4-(3,6-Diamino-2-carbamoyl-5-cyanothieno[2,3-b]pyridin-4-yl)benzoic acid 856175-18-3P, 4-(3,6-Diamino-2-carbamoyl-5-cyanothieno[2,3-

b]pyridin-4-yl)benzoic acid methyl ester 856175-19-4P,

3,6-Diamino-4-(3-bromophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-21-8P, 3,6-Diamino-4-(3-fluorophenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-22-9P,

3,6-Diamino-4-(4-trifluoromethylphenyl)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-24-1P,

3,6-Diamino-4-(4-cyanopheny1)-5-cyanothieno[2,3-b]pyridine-2-carboxamide 856175-22-2P, 3,6-Diamino-4-(4-fluoropheny1)-5-cyanothieno[2,3-b]pvridine-2-carboxamide 856175-27-4P.

3,6-Diamino-5-cyano-4-[3-[[3-(piperidin-1-

Ι

yl)propionyl]amino]phenyl]thieno[2,3-b]pyridine-2-carboxamide

RL. PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(inhibitor; preparation of thienopyridinecarboxamides as IKK2 inhibitors for the treatment of HBV infection)

RN 383156-16-9 CAPLUS CN Thieno[2,3-blpyridi

Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)

RN 856175-14-9 CAPLUS CN Thieno[2,3-b]pyridin-2-carboxamide, 3,6-diamino-5-cyano-4-(3,4-dihydroxyphenyl)- (CA INDEX NAME)

RN 856175-16-1 CAPLUS
CN Thieno(2,3-b)pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-(3,5-dimethoxyphenyl)- (CA INDEX NAME)

RN 856175-17-2 CAPLUS
CN Benzoic acid, 4-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin4-yl|- (CA INDEX NAME)

RN 856175-18-3 CAPLUS
CN Benzoic acid, 4-[3,6-diamino-2-(aminocarbonyl)-5-cyanothieno[2,3-b]pyridin-4-yl]-, methyl ester (CA INDEX NAME)

RN 856175-19-4 CAPLUS CN Thieno[2,3-b]pyridine-

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(3-bromophenyl)-5-cyano- (CA INDEX NAME)

RN 856175-21-8 CAPLUS CN Thieno[2,3-b]pyridin

Thieno(2,3-b)pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(3-fluorophenyl)- (CA INDEX NAME)

RN 856175-22-9 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 856175-24-1 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-5-cyano-4-(4-cyanophenyl)- (CA INDEX NAME)

RN 856175-25-2 CAPLUS

CN Thieno(2,3-b)pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(4-fluorophenyl)- (CA INDEX NAME)

RM 856175-27-4 CAPLUS

Thieno[2,3-b]pyridine-2-carboxamide, CN 3,6-diamino-5-cyano-4-[3-[[1-oxo-3-(1-piperidiny1)propy1]amino]pheny1]-(CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:482460 CAPLUS

DOCUMENT NUMBER: 144:212685

TITLE: Multicomponent synthesis of functionally substituted

2-alkylthiopyridines and thieno[2,3-b]pyridines

AUTHOR(S): Dyachenko, V. D.; Krasnikov, D. A. CORPORATE SOURCE: Nats. Pedagog. Univ. im. Tarasa Shevchenko, Luhansk,

Ukraine

SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (2005), 71(5-6), 86-92

CODEN: UKZHAU; ISSN: 0041-6045

PUBLISHER: Institut Obshchei i Neorganicheskoi Khimii im. V. I.

Vernadskogo NAN Ukrainy

DOCUMENT TYPE: Journal

LANGUAGE: Russian

CASREACT 144:212685 OTHER SOURCE(S):

GI

AB Reactions of [aryl(heteroaryl)methylene]cyanothioacetamides R1CH:C(CN)C(S)NH2 (R1 = 2-furyl, Ph, 4-C1C6H4) with cyanoacetanilides NCCH2CONHR2 (R2 = 2-C1C6H4, 2-MeOC6H4) or cyanothioacetamide and functionalized alkyl halides R3CH2X (R3 = H2NCO, MeO2C, 4-BrC6H4CO, HC.tplbond.C, CN, etc.; X = Cl, Br, iodo) in the presence of N-Et morpholine were applied for synthesis of a series of 2-alkylthio-6-amino-4-aryl(heteroaryl)-3,5-dicyanopyridines I and 3,6-diamino-4-aryl(heteroaryl)-5-cyanothieno[2,3-b]pyridines II.

ΤТ 383156-16-9P

> RL: SPN (Synthetic preparation); PREP (Preparation) (multicomponent preparation of functionally substituted (alkylthio) (amino) dicyanopyridines and

diamino(cyano)thieno[2,3-b]pyridines from (cyano)thioacetamides, cyanoacetamides and functionalized alkyl halides)

383156-16-9 CAPLUS RN

Thieno[2,3-b]pvridine-2-carboxamide,

3,6-diamino-4-(4-chlorophenvl)-5-cvano- (CA INDEX NAME)

L7 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:346859 CAPLUS

DOCUMENT NUMBER:

142:411342

TITLE: Preparation of pyridothiophene compounds as HSP90

inhibitors

INVENTOR(S): Drysdale, Martin James; Dymock, Brian William;

Barril-Alonso, Xavier PATENT ASSIGNEE(S): Vernalis Cambridge Limited, UK

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Pat.ent.

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE GI

```
WO 2005034950
                                20050421
                                           WO 2004-GB4216
                          A1
                                                                   20041005
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     EP 1680108
                          A1
                                20060719
                                            EP 2004-768755
                                                                   20041005
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                                            US 2007-574788
     US 20070213328
                          A1
                                20070913
                                                                    20070119
PRIORITY APPLN. INFO .:
                                            GB 2003-23810
                                                                   20031010
                                            WO 2004-GB4216
                                                                   20041005
                        CASREACT 142:411342; MARPAT 142:411342
OTHER SOURCE(S):
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208254-40-4P 331984-46-4P 342384-57-0P

The title compds. I [R2 = (Ar1)m(Alk1)p(Z)r(Alk2)sQ (wherein Ar1 = (un) substituted (hetero) arvl, Alkl, Alk2 = (un) substituted alkylene, alkenylene; m, p, r and s = 0-1; Z = 0, S, CO, CS, etc.; Q = H, (un) substituted carbocyclic or heterocyclic); R3 = H, (un) substituted alkyl, (hetero)aryl, etc.; R4 = carboxylic ester, carboxamide or sulfonamide group], useful in therapy, particularly for the treatment of a disorder mediated by excessive or inappropriate HSP90 activity, were prepared E.g., a multi-step synthesis of II, starting from malononitrile and benzaldehyde, was given. The compound II showed IC50 of <10 µM against HSP90 binding in fluorescence polarization assay. The pharmaceutical composition comprising the compound I is disclosed.

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361178-59-8P 361477-78-3P 361478-09-3P
369394-78-5P 369609-75-6P 383156-16-9P
476319-10-5P 850448-55-4P 850448-56-5P
850448-57-6P 850448-58-7P 850448-59-8P
850448-60-1P 850448-61-2P 850448-62-3P
850448-63-4P 850448-64-5P 850448-65-6P
850448-66-7P 850448-67-8P 850448-68-9P
850448-69-0P 850448-70-3P 850448-71-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
```

(preparation of thienopyridines as HSP90 inhibitors)

RN 208254-40-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(4-bromophenyl)-5-cyano- (CA INDEX NAME)

RN 331984-46-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{H_{2}N} & \mathbf{N} & \mathbf{S} & \mathbf{C-NH_{2}} \\ \mathbf{NC} & \mathbf{NH_{2}} & \mathbf{NH_{2}} \end{array}$$

RN 342384-57-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-(3-methoxyphenyl)-4-[4-(1-methylethyl)phenyl]- (CA INDEX NAME)

RN 361178-59-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]-N-2-thiazolyl- (CA INDEX NAME)

RN 361477-78-3 CAPLUS
CN Thieno[2,3-b]pyridin-2-carboxamide,
3,6-diamino-5-cyano-4-(4-ethoxyphenyl)- (CA INDEX NAME)

RN 361478-09-3 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3.6-diamino-5-cyano-4-(3.4-dimethoxyaba

3,6-diamino-5-cyano-4-(3,4-dimethoxyphenyl)- (CA INDEX NAME)

RN 369394-78-5 CAPLUS
CN Thieno[2,3-b]pyridine-2-carboxamide,
3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]-N-(2-methylphenyl)- (CA
INDEX NAME)

RN 369609-75-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(4-bromophenyl)-5-cyano-N-phenyl- (CA INDEX NAME)

RN 383156-16-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(4-chlorophenyl)-5-cyano- (CA INDEX NAME)

RN 476319-10-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-[4-(1-methylethyl)phenyl]- (CA INDEX NAME) 10/574,788

RN 850448-55-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-ethyl-4-phenyl-(CA INDEX NAME)

RN 850448-56-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-(1-methylethyl)-4-phenyl- (CA INDEX NAME)

RN 850448-57-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{0} & \mathbf{0} \\ \mathbf{C} - \mathbf{N} \mathbf{H} - \mathbf{C} \mathbf{H}_2 - \mathbf{P} \mathbf{h} \\ \mathbf{N} \mathbf{0} & \mathbf{N} \mathbf{H}_2 \end{array}$$

RN 850448-58-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N,N-diethyl-4-phenyl- (CA INDEX NAME)

RN 850448-59-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-methyl-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{0} & \mathbf{0} \\ \mathbf{C} - \mathbf{N} \mathbf{H} \mathbf{M} \\ \mathbf{NC} & \mathbf{N} \mathbf{H}_2 \end{array}$$

RN 850448-60-1 CAPLUS

CN Glycine, N-[(3,6-diamino-5-cyano-4-phenylthieno[2,3-b]pyridin-2-yl)carbonyl]-, methyl ester (CA INDEX NAME)

RN 850448-61-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-[(4-methyl-1-piperazinyl)carbonyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ \text{H}_2\text{N} & & & & \\ \text{NC} & & & & \\ \text{NP} & & & & \\ \end{array}$$

- RN 850448-62-3 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxamide,
 - 3,6-diamino-5-cyano-N-[3-(dimethylamino)propyl]-4-phenyl- (CA INDEX NAME)

- RN 850448-63-4 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-[3-(4-methyl-1-piperazinyl)propyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{H}_2\text{N} \\ \text{NC} \\ \text{NH}_2 \\ \end{array}$$

- RN 850448-64-5 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxamide,
- 3,6-diamino-5-cyano-N-[3-(4-morpholinyl)propyl]-4-phenyl- (CA INDEX NAME)

- RN 850448-65-6 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile,

3,6-diamino-2-(4-morpholinylcarbonyl)-4-phenyl- (CA INDEX NAME)

RN 850448-66-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-[2-(4-morpholiny1)ethy1]-4-pheny1- (CA INDEX NAME)

$$\begin{array}{c} \text{H}_2\text{N} \\ \text{NC} \\ \text{NH}_2 \\ \end{array}$$

RN 850448-67-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-N-(2-amino-2-oxoethyl)-5-cyano-4-phenyl- (CA INDEX NAME)

RN 850448-68-9 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-[2-(dimethylamino)ethyl]-4-phenyl- (CA INDEX NAME)

RN 850448-69-0 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-N-(2-hydroxyethyl)-4-phenyl- (CA INDEX NAME)

RN 850448-70-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,

3,6-diamino-N-(2-aminoethyl)-5-cyano-4-phenyl- (CA INDEX NAME)

- RN 850448-71-4 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-[4-(1-methylethoxy)phenyl]-, methyl ester (CA INDEX NAME)

- IT 413606-58-3P, 3,6-Diamino-5-cyano-4-phenyl-thieno[2,3-b]pyridine-2carboxylic acid ethyl ester 850448-72-5P,
 3,6-Diamino-5-cyano-4-phenyl-thieno[2,3-b]pyridine-2-carboxylic acid
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 - (preparation of thienopyridines as HSP90 inhibitors)
- RN 413606-58-3 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-phenyl-, ethyl ester (CA INDEX NAME)

- RN 850448-72-5 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3,6-diamino-5-cyano-4-phenyl-(CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

V

ANSWER 14 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1003588 CAPLUS

DOCUMENT NUMBER: 143.266879

TITLE:

Pyridinethiones as precursors of thieno- and azolopyridines & pyridothieno-pyridoazoloazines AUTHOR(S): Youssef, Ayman M. S.

Chemistry Department, Faculty of Science, Fayoum CORPORATE SOURCE:

Branch, Cairo University, Egypt Mansoura Science Bulletin, A: Chemistry (2004), 31(1), SOURCE:

49-65 CODEN: MSBCF4: ISSN: 1110-4562

PUBLISHER: Mansoura University

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:266879

GI

AB 2-Mercapto-6-oxo-4-phenyl-1,2-dihydropyridine-3,5-dicarbonitrile (I) was reacted with an equimolar amount of bromomalononitrile to form 3-amino-5-oxo-7-phenyl-5H-thiazolo[3,2-a]pyridine-2,6,8-tricarbonitrile II. Compound II was reacted with malononitrile and Et cyanoacetate to give thiazolo[3,2-a:4,5-b]dipyridines III (R1 = CN, EtO2C). Reaction of II with carbon disulfide gave 4-imino-9-oxo-7-phenyl-1,2,4,9-tetrahydro-2thioxopyrido[2',1':2,3]thiazolo[4,5-d][1,3]thiazine-6,8-dicarbonitrile. Cycloalkylation of I upon heating with chloroacetonitrile afforded 3-amino-6-oxo-4-phenyl-6,7-dihydrothieno[2,3-b]pyridine-2,5-dicarbonitrile

IV, which was converted into functionalized

pyrido[3',2':4,5]thieno[3,2-d]pyrimidines on treatment with formic acid or

formamide. Ethylation of I with Et iodide gave the corresponding S-Et

derivative, which on treatment with hydrazine hydrate gave pyrazolo[3,4-b]pyridine-5-carbonitrile V (R2 = H2N). The latter was

diazotized and coupled with naphthols or quinoline to afford the

corresponding arvlazo derivs. V (R2 = 4-hydroxynaphth-1-vlazo, 2-hvdroxvnaphth-1-vlazo, 5-guinolinvlazo).

141481-02-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of thienopyridines, pyridothienopyrimidines, pyrazolopyridines, pyridopyrazolopyrimidines and other polycyclic heterocycles from

(dicyano) (mercapto) pyridone)

141481-02-9 CAPLUS RN

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile,

3-amino-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)

863560-46-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of thienopyridines, pyridothienopyrimidines, pyrazolopyridines, pyridopyrazolopyrimidines and other polycyclic heterocycles from

(dicyano) (mercapto) pyridone)

RN 863560-46-7 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,

3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)

REFERENCE COUNT:

17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

2001:643807 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 135:357861

TITLE: Versatile starting materials for novel

1, m-bis(pyridin-4-ylphenoxy)alkanes, and their corresponding bis(thieno[2,3-b]pyridin-4-ylphenoxy)

derivatives

AUTHOR(S): Abbas, Ashraf A.; Elneairy, Mohamed A. A.; Mabkhot,

Yehia N.

CORPORATE SOURCE: Chemistry Department, Faculty of Sciences, Cairo

University, Giza, Egypt

SOURCE: Journal of Chemical Research, Synopses (2001), (4),

124-126, 0411-0427

CODEN: JRPSDC; ISSN: 0308-2342 PUBLISHER: Science Reviews Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: Journal LANGUAGE: English

OTHER SOURCE(S):

CASREACT 135:357861

T.

- AB A synthesis is described, starting from p-hydroxybenzaldehyde, of some new bis(activated styrene) derivs., e.g. I, and their conversion into novel bis(pyridin-4-yl) ethers, e.g. II, and bis(thieno[2,3-b]pyridine) derivs., e.g. III.
- IT 372187-53-6P 372187-54-7P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of bis(pyridinylphenoxy)- and

bis(thienopyridinylphenoxy)alkanes)

RN 372187-53-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,

3,6-diamino-5-cyano-4-(4-hydroxyphenyl)- (CA INDEX NAME)

RM 372187-54-7 CAPLUS CN

Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-5-cyano-4-(4-hydroxyphenyl)- (CA INDEX NAME)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:79511 CAPLUS

DOCUMENT NUMBER: 130:237502

Synthesis and recyclization of TITLE:

4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans AUTHOR(S): Dyachenko, V. D.; Litvinov, V. P.

CORPORATE SOURCE: Shevchenko Lugansk State Pedagogical Institute, Luhansk, Russia

SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (1998), 34(4), 557-563

CODEN: RJOCEO; ISSN: 1070-4280

MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:237502

Reaction of (arvlmethylene) malononitriles with cvanothioacetamide or of

arylmethylenecyanothioacetamides with malononitrile affords 4-aryl-2,6-diamino-3,5-dicyano-4H-thiopyrans which were further recyclized

into 6-amino-4-aryl-3,5-dicyanopyridine-2(1H)-thiones. On the basis of

the latter compds., substituted 2-alkylthiopyridines and

thieno[2,3-b]pyridines were prepared 4-Hydroxybenzalcyanothioacetamide

reacts with α-bromo ketones by Hantzsch with the formation of

thiazolyl-substituted acrylonitriles acylated with acetic anhydride at the OH group.

221179-10-8P

PUBLISHER:

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and cyclization of (aryl)diaminodicyanothiopyran derivs.)

RN 221179-10-8 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,

3,6-diamino-2-(3-bromobenzoy1)-4-(4-hydroxypheny1)- (CA INDEX NAME)

IT 221179-09-5P 221179-11-9P 221179-12-0P

221179-13-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 221179-09-5 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,

3,6-diamino-2-(4-chlorobenzoyl)-4-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 221179-11-9 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-([1,1'-biphenyl]-4-ylcarbonyl)-4-(4-hydroxyphenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} \mathbf{H_2N} & \mathbf{N} & \mathbf{S} & \mathbf{Ph} \\ \mathbf{NC} & \mathbf{NH_2} & \mathbf{NH_2} \end{array}$$

RN 221179-12-0 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-4-(4-hydroxyphenyl)-2-(4-methylbenzoyl)- (CA INDEX NAME)

221179-13-1 CAPLUS RN

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-(3,4-dichlorobenzoyl)-4-(4-hydroxyphenyl)- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

13 L7 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:814730 CAPLUS

DOCUMENT NUMBER: 130:191419

TITLE: Synthesis, antihistaminic and cytotoxic activity of

pyridothieno- and pyridodithienotriazines

AUTHOR(S): Quintela, Jose Maria; Peinador, Carlos; Veiga, Mari Carmen; Botana, Luis M.; Alfonso, Amparo; Riquera,

Ricardo

CORPORATE SOURCE: Departamento de Ouimica Fundamental e Industrial,

Facultad de Ciencias, Universidad de La Coruna, La

Coruna, 15071, Spain

European Journal of Medicinal Chemistry (1998), SOURCE:

33(11), 887-897

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal English

LANGUAGE: The synthesis of pyrido[3',2':4,5]thieno[3,2-d]-1,2,3-triazines and pyrido[3',2':4,5]dithieno[3,2-d]-1,2,3-triazines, and their inhibitory action on the release of histamine from rat mast cells under immunol. and

chemical stimulus are presented. Some compds. are strong inhibitors under all the conditions tested while some are good inhibitor in all conditions except when it is preincubated with ovalbumin. Some compds, are good inhibitors in the immunol. expts. but are practically inactive under chemical stimulus. Some compds. show in vitro cytotoxic activity against several human and mouse tumoral cell lines with IC50 values well under 1 mg/mL.

157332-06-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and antihistaminic and cytotoxic structure activity relations of pyridothieno- and pyridodithienotriazines)

RN 157332-06-4 CAPLUS

CN Thieno [2,3-b] pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)

Ph NH2 CN S E±0

REFERENCE COUNT:

L7 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

29

ACCESSION NUMBER: 1998:737279 CAPLUS DOCUMENT NUMBER:

130:66466

TITLE:

Synthesis and antiallergic activity of

THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

pyridothienopyrimidines

AUTHOR(S): Quintela, Jose M.; Peinador, Carlos; Veiga, Carmen; Gonzalez, Liliane; Botana, Luis M.; Alfonso, Amparo;

Riguera, Ricardo

CORPORATE SOURCE: Departamento de Quimica Fundamental e Industrial, Facultad de Ciencias, Universidad de La Coruna, La

Couruna, 15071, Spain SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(10),

1911-1925

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER . Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

- AB The synthesis of a series of pyridothienopyrimidines and their evaluation as inhibitors or inducers of the release of histamine from rat mast cells is reported. The activity was measured after immunol. stimulation with ovalbumin and chemical stimulation with polymer 48/80 and the drugs adriamycin and vinorebline. The expts. were carried out with and without preincubation of the stimulus with the cells before addition of the drug. Several pyridothienopyrimidines show inhibitory IC50 values in the range 2-25 µM, indicating they are up to 100 times more potent than cromoglycate (DSGG) and 10 times greater than Ketotifen.

 4-(4-Acetylphenyl)piperazino-7,9-diphenylpyrido[3',2':4,5]thieno[3,2-dipyrimidine is a potent inhibitor in all the conditions tested and shows IC50-9-25µM. 2-Dimethylamino-4-piperazino-7,9-diphenylpyrido[3',2':4,5]thieno[3,2-dipyrimidine is cytotoxic in vitro (IC50 = 0.1-0.2µm/mL) against P-388, A-549, HT-29, and MEL-28 tumor
 - (IC50 = 0.1-0.2µg/mL) against P-388, A-549, HT-29, and MEL-28 tumor cell lines.

 1 146630-15-1 157332-06-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
- RN 14630-15-1 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-6-ethoxy-4-phenyl-(CA INDEX NAME)

- RN 157332-06-4 CAPLUS
- CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)

- IT 217954-46-6P 217955-82-3P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (synthesis and antiallergic activity of pyridothienopyrimidines)
- RN 217954-46-6 CAPLUS
- CN Carbamimidic chloride, N'-(2,5-dicyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3-yl)-N,N-dimethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{EtO} & \text{N} & \text{S} & \text{CN} \\ & \text{C1} & \\ \text{NC} & \text{N} = \text{C} - \text{NMe}_2 \end{array}$$

217955-82-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 5-cyano-3-[[(dimethylamino)methyl]amino]-6-ethoxy-4-phenyl- (CA INDEX NAMÉ)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 19 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:617964 CAPLUS

DOCUMENT NUMBER: 129:275822 ORIGINAL REFERENCE NO.: 129:56241a,56244a

TITLE: Michael reaction in synthesis of

6-amino-4-(4-butoxyphenyl)-3,5-dicyanopyridine-2(1H)thione

AUTHOR(S): Dyachenko, V. D.; Litvinov, V. P.

CORPORATE SOURCE: T. G. Shevchenko Lugansk State Pedagogical Institute,

Luhansk, 348011, Ukraine SOURCE: Chemistry of Heterocyclic Compounds (New

York) (Translation of Khimiva Geterotsiklicheskikh

Soedinenii) (1998), 34(2), 188-194

CODEN: CHCCAL: ISSN: 0009-3122 Consultants Bureau

PUBLISHER: DOCUMENT TYPE:

Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:275822

AR The reaction of 4-butoxybenzalcyanoacetic ester with cyanothioacetamide yielded 6-amino-4-(4-butoxyphenyl)-3,5-dicyanopyridine-2(1H)-thione, also synthesized by recyclization of 2,6-diamino-4-(4-butoxyphenyl)-3,5-dicyano-4H-thiopyran and condensation of 4-butyloxybenzaldehyde with a 2-fold excess of cvanothioacetamide. Substituted 2-alkylthiopyridines and

thieno(2,3-b)pyridines were obtained with the indicated pyridinethione.

214046-23-8P 214046-24-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 214046-23-8 CAPLUS

CN Thieno[2,3-b]pvridine-2-carboxamide,

3,6-diamino-4-(4-butoxyphenyl)-5-cyano-N-phenyl- (CA INDEX NAME)

RN 214046-24-9 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3,6-diamino-4-(4-butoxyphenyl)-(CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:310476 CAPLUS DOCUMENT NUMBER: 129:41055

DOCUMENT NUMBER: 129:41055 ORIGINAL REFERENCE NO.: 129:8635a,8638a

TITLE: New route to 6-amino-4-aryl-3,5-dicyanopyridine-2(1H)-

thiones

AUTHOR(S): Dyachenko, V. D.; Krivokolysko, S. G.; Sharanin, Yu.

A.; Litvinov, V. P.
CORPORATE SOURCE: Zelinskii Institute

CORPORATE SOURCE: Zelinskii Institute of Organic Chemistry, Russian
Academy of Sciences, Moscow, 117913, Russia
SOURCE: Russian Journal of Organic Chemistry (Translation of

Zhurnal Organicheskoi Khimii) (1997), 33(7), 1014-1017 CODEN: RJOCEQ; ISSN: 1070-4280

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

- RL: PNU (Preparation, unclassified); PREP (Preparation) (preparation of aminoaryldicyanopyridinethiones)
- RN 208254-38-0 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-(4-bromobenzoyl)-4-(4-bromophenyl)- (CA INDEX NAME)

- RN 208254-39-1 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-4-(4-bromophenyl)-2-(4-chlorobenzoyl)- (CA INDEX NAME)

RM 208254-40-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3,6-diamino-4-(4-bromophenyl)-5-cyano- (CA INDEX NAME)

$$\begin{array}{c} \text{Br} \\ \text{NH}_2 \\ \text{NC} \\ \text{NC}$$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:41363 CAPLUS DOCUMENT NUMBER: 128:140584

ORIGINAL REFERENCE NO.: 128:27655a,27658a TITLE: New method for the synthesis of

6-amino-4-aryl-3,5-dicyano-3,4-dihydropyridine-2(1H)-

thiones by recyclization of 4-aryl-2,6-diamino-4H-thiopyrans

Dyachenko, V. D.; Krivokolysko, S. G.; Sharanin, Yu. AUTHOR (S):

A.; Litvinov, V. P.

CORPORATE SOURCE: T. G. Shevchenko Lugansk State Pedagogical Institute,

Luhansk, 348011, Ukraine

SOURCE:

Chemistry of Heterocyclic Compounds (New York) (Translation of Khimiya Geterotsiklicheskikh

Soedinenii) (1998), Volume Date 1997, 33(7), 793-798

CODEN: CHCCAL: ISSN: 0009-3122

PUBLISHER: Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

Ammonium 6-amino-4-aryl-3,5-dicyano-1,4-dihydropyridine-2-thiolates were synthesized via recyclization of 4-ary1-2,6-diamino-3,5-dicyano-4Hthiopyrans in the presence of organic bases. On acidification of the products, the corresponding substituted 3,4-dihydro-2(1H)-pyridinethiones were obtained and used in the synthesis of

2-alkylthio-1,4-dihydropyridines, bis(2-pyridinyl)disulfides and thieno[2,3-b]pyridines.

T 202405-75-2P 202405-76-3P 202405-77-4P

202405-75-2P 202405-76-3P 202405 202405-78-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and reactions of amino(thioxo)pyridinedicarbonitriles)

RN 202405-75-2 CAPLUS

CN Thieno[2,3-b]pvridine-5-carbonitrile,

3,6-diamino-2-benzovl-4-(2-chlorophenvl)- (CA INDEX NAME)

RN 202405-76-3 CAPLUS

CN Thieno [2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-(4-bromobenzoyl)-4-(2-methylphenyl)- (CA INDEX NAME)

RN 202405-77-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,

3,6-diamino-2-benzoyl-4-(2-methylphenyl)- (CA INDEX NAME)

RN 202405-78-5 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-4-(2-chlorophenyl)-2-(2,4-dimethylbenzoyl)- (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:295302 CAPLUS DOCUMENT NUMBER: 126:305519

ORIGINAL REFERENCE NO.: 126:59179a,59182a

TITLE: Esters and nitriles of 3-phenylacrylic and 3-(2-furyl)acrylic acid in synthesis of

6-amino-3,5-dicyano-4-phenyl(or 2-furyl)pyridine-2(1H)-thiones and -selenones

AUTHOR(S): Krivokolyko, S. G.; Dyachenko, V. D.

CORPORATE SOURCE: Vostochno Ukr. Univ., Luhansk, Ukraine

SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition)

(1996), 62(11-12), 61-66

CODEN: UKZHAU; ISSN: 0041-6045

PUBLISHER: Institut Obshchei i Neorganicheskoi Khimii NAN Ukrainy

DOCUMENT TYPE: Journal LANGUAGE: Russian

LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 126:305519

AB Reaction of esters and nitriles of 3-phenyl- and 3-(2-furyl)acrylic acid with cyanothio(seleno)acetamide leads to substituted

6-amino-3,5-dicyano-4-phenyl(2-furyl)pyridine-2(1H)-thiones and -selenones

stabilized as the N-methylmorpholinium salts of

6-amino-3,5-dicyano-4-phenyl(2-furyl)pyridine-2(1H)-thiols and -selenols. These are converted to 2-(alkylthio)pyridines and thieno[2,3-b]pyridines.

IT 189278-44-2P 189278-46-4P 189278-50-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 189278-44-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-benzoyl-4-phenyl- (CA INDEX NAME)

RN 189278-46-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,

3,6-diamino-2-(4-chlorobenzoyl)-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} H_2N & N & S & C \\ NC & NH_2 & \\ \end{array}$$

RN 189278-50-0 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-([1,1'-biphenyl]-4-ylcarbonyl)-4-phenyl- (CA INDEX NAME)

L7 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1996:86526 CAPLUS

DOCUMENT NUMBER: 1996:86526

ORIGINAL REFERENCE NO.: 124:43031a,43034a
TITLE: A synthesis for so

TITLE: A synthesis for some new thieno[2,3-b:4,5-b]dipyridines

AUTHOR(S): Veiga, Maria Carmen; Quintela, Jose Maria; Peinador,

Carlos

CORPORATE SOURCE: Faculty Ciencias, Univ. La Coruna, La Coruna, 15071, Spain

SOURCE: Heterocycles (1996), 43(1), 91-100

CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 124:232284

AB An efficient method is proposed for the

B An efficient method is proposed for the preparation of substituted thieno[2,3-b:4,5-b]dipyridines based on the Friedlaender synthesis of 3-amino-5-cyano-7-ethoxy-2-formyl-4-phenylthieno[2,3-b]pyridine (1) with acyclic, cyclic, heterocyclic and α,β -unsatd. Ketones. In addition, the reaction of 1 with guanidine sulfate yielded the fused triheterocyclic pyrido[3',2':4,5]-thieno[3,2-d]pyrimidine system.

IT 157332-07-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(Friedlaender cyclization with ketones)

RN 157332-07-5 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-formyl-4-phenyl-(CA INDEX NAME)

ANSWER 24 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:357584 CAPLUS

DOCUMENT NUMBER: 122:214037

ORIGINAL REFERENCE NO.: 122:39127a,39130a

TITLE: Substituted 3-aminothieno[2,3-b]pyridine-2-carboxamide

as a synthon for polyheterocyclic compounds. Preparation of new pyridothieno-1,2,3-triazines and

related derivatives

AUTHOR(S): Peinador, Carlos; Veiga, M. Carman; Ojea, Vicente; Ouintela, Jose M.

CORPORATE SOURCE:

Fac. Cienc., Univ. La Coruna, La Coruna, E-15071,

Spain

SOURCE: Heterocycles (1995), 41(1), 37-46 CODEN: HTCYAM; ISSN: 0385-5414

PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- Pyrido[3',2':4,5]thieno[3,2-d]-1,2,3-triazines I (R = H, Me, CH2COPh, CH2CN) were synthesized from 3-aminothieno[2,3-b]pyridine by diazotization and subsequent treatment with electrophilic reagents. Reaction of triazinone I (R = H) with phosphorus oxychloride lead to a mixture of the triheterocyclic compound II and the 4-chloro substituted triazine. Aminolysis of II with either hydrazine or primary and secondary amines yielded thienopyridines, e.g. III. Nitrosation of III afforded the 4-substituted triazinone IV.
- 146630-15-1
 - RL: RCT (Reactant); RACT (Reactant or reagent)

(substituted aminothienopyridinecarboxamide as a synthon for polyheterocyclic compds., preparation of new pyridothienotriazines and related derivs.)

- RN 146630-15-1 CAPLUS
- Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-6-ethoxy-4-phenyl-(CA INDEX NAME)

IT 161893-31-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(substituted aminothienopyridinecarboxamide as a synthon for polyheterocyclic compds., preparation of new pyridothienotriazines and

related derivs.) RN 161893-31-8 CAPLUS

CN 4H-Pyrido[3',2':4,5]thieno[3,2-d][1,3]oxazine-8-carbonitrile,

2-(3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2-yl)-7-ethoxy-4-oxo-9-phenyl- (CA INDEX NAME)

IT 161893-33-0P 161893-34-1P 161893-35-2P

161893-38-5P 161893-39-6P 161893-40-9P 161893-41-0P 161893-42-1P 161893-43-2P

161893-44-3P 161893-45-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(substituted aminothienopyridinecarboxamide as a synthon for polyheterocyclic compds., preparation of new pyridothienotriazines and

related derivs.)

RN 161893-33-0 CAPLUS CN Thieno[2,3-b]pyridine-2-carboxylic acid,

3-[[(3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2-

yl)carbonyl]amino]-5-cyano-6-ethoxy-4-phenyl-, hydrazide (CA INDEX NAME)

RN 161893-34-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carbonyl azide, 5-cyano-3-(8-cyano-7-ethoxy-4-oxo-9-phenylpyrido[3',2':4,5]thieno[3,2-d]-1,2,3-triazin-3(4H)-yl)-6-ethoxy-4-phenyl- (CA INDEX NAME)

RN 161893-35-2 CAPLUS

CN Pyrido[3',2':4,5]thieno[3,2-d]pyrimidine-8-carbonitrile,
3-[5-cyano-6-ethoxy-2-(1,3,4-oxadiazol-2-yl)-4-phenylthieno[2,3-b]pyridin-3-yl]-7-ethoxy-3,4-dihydro-4-oxo-9-phenyl- (CA INDEX NAME)

RN 161893-38-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,
3-[(3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2yl)carbonyl]amino]-5-cyano-6-ethoxy-4-phenyl-, 1-methylhydrazide (CA
INDEX NAME)

RN 161893-39-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3-amino-5-cyano-N-[5-cyano-6-ethoxy-2-[(methylamino)carbonyl]-4phenylthieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA INDEX NAME)

RN 161893-40-9 CAPLUS CN Thienol2.3-blovridi

Thieno[2,3-b]pyridine-2-carboxamide,
3-amino-N-[2-[(butylamino)carbonyl]-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-3-yl]-5-cyano-6-ethoxy-4-phenyl- (CA INDEX NAME)

RN 161893-41-0 CAPLUS CN Thieno[2,3-b]pyridir

Thieno[2,3-b]pyridine-2-carboxamide,
3-amino-5-cyano-N-[5-cyano-6-ethoxy-4-phenyl-2[[(phenylmethyl)amino]carbonyl]thieno[2,3-b]pyridin-3-yl]-6-ethoxy-4phenyl- (CA INDEX NAME)

RN 161893-42-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-N-[5-cyano-6-ethoxy-4-phenyl-2-(1piperidinylcarbonyl)thieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl-INDEX NAME)

RN 161893-43-2 CAPLUS CN Thieno(2.3-b)pyridi

Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-N-[5-cyano-6-ethoxy-2-(4-morpholinylcarbonyl)-4phenylthieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA INDEX NAME)

RN 161893-44-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide, 3-amino-5-cyano-N-[5-cyano-6-ethoxy-2-[(4-methyl-1-piperazinyl)carbonyl]-4phenylthieno[2,3-b]pyridin-3-yl]-6-ethoxy-4-phenyl- (CA INDEX NAME)

RN 161893-45-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,
3-[((3-amino-5-cyano-6-ethoxy-4-phenylthieno[2,3-b]pyridin-2yl)carbonyl]amino]-5-cyano-6-ethoxy-4-phenyl-, ethyl ester (CA INDEX NAME)

L7 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1995:327947 CAPLUS

DOCUMENT NUMBER: 122:187341

122:34315a,34318a ORIGINAL REFERENCE NO.:

TITLE:

Nitrile cyclization reactions. LIV. Synthesis and properties of 6-amino-4-aryl-3,5-dicyanopyridin-2(1H)ones, -thiones, -vlidenemalononitriles and their hydrogenated analogs

Sharanin, Yu. A.; Krivokolysko, S. G.; Dyachenko, V. AUTHOR(S):

Vostochnoukr. Univ., Luhansk, Ukraine CORPORATE SOURCE:

SOURCE: Zhurnal Organicheskoi Khimii (1994), 30(4), 581-7 CODEN: ZORKAE; ISSN: 0514-7492

PUBLISHER: Nauka DOCUMENT TYPE: Journal LANGUAGE: Russian GI

- AB RCH:C(CN)CSNH2 (R = aryl, heteroaryl) reacted with NCCH2C(X)NH2 [X = 0, S, C(CN)2] to give, after acidification, products such as I and II. Also obtained were thienopyridines, e.g., III, and thiazolopyridinium triiodide IV.
- IT 161689-62-9P 161689-65-2P 161689-66-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- RN 161689-62-9 CAPLUS
 CN Thieno[2,3-b]pyridine-5-carbonitrile,
 3,6-diamino-2-(4-chlorobenzoyl)-4-(2-chlorophenyl)- (CA INDEX NAME)

- RN 161689-65-2 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile,
 3,6-diamino-2-benzoyl-4-(4-chlorophenyl)- (CA INDEX NAME)

- RN 161689-66-3 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile, 3,6-diamino-2-(4-chlorobenzoy1)-4-(2-iodopheny1)- (CA INDEX NAME)

L7 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1995:94186 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

122:31452

ORIGINAL REFERENCE NO.: TITLE:

122:6207a,6210a A ready entry to substituted derivatives of

AUTHOR(S):

pyrido[3'',2'':4',5']thleno[2',3':5,6]pyrido[2,3d]pyrimiddines, a new tetraheterocyclic ring system
Peinador, Carlos; Veiga, M. Carmen; Ojea, Vicente;
Quintela, Jose M.

CORPORATE SOURCE:

Fac. Ciencias, Univ. La Coruna, La Coruna, E-15071,

SOURCE: Spain

Heterocycles (1994), 38(9), 2065-72 CODEN: HTCYAM: ISSN: 0385-5414

DOCUMENT TYPE: LANGUAGE: Journal English CASREACT 122:31452

OTHER SOURCE(S):

AB Several 4-substituted pyrido[3'',2'':4',5']thieno[2',3':5,6]pyrido[2,3-d]pyrimidines [1] R = morpholino, piperidino, 4-benzylpiperazino, etc.] were prepared by reaction of the chloro derivative I [R = Cl] (preparation

thienopyridinecarboxaldehyde derivative II with malononitrile and ${\tt C12N+Me2C1-given}$) with nucleophilic agents.

IT 157332-07-5

E±0

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with malononitrile)

CHO II

157332-07-5 CAPLUS RN

Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-formyl-4-phenyl-(CA INDEX NAME)

ANSWER 27 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:557594 CAPLUS DOCUMENT NUMBER: 121:157594

ORIGINAL REFERENCE NO.:

121:28533a,28536a TITLE:

An efficient iminophosphorane-mediated synthesis for pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivatives Peinador, Carlos; Moreira, Maria J.; Quintela, Jose M. AUTHOR(S):

CORPORATE SOURCE: Dep. Ouim, Fundam, Ind., Fac. Cienc., La Coruna,

E-15071, Spain SOURCE:

Tetrahedron (1994), 50(22), 6705-14 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 121:157594

GI

AR A ready one-pot preparation for pyridothienopyrimidines bearing various substituents at position 2 of the pyrimidine ring is reported. The aza Wittig-type reaction of iminophosphoranes derived from the aldehyde I (R = NH2, R1 = CHO) with heterocumulenes leads to functionalized fused pyrimidines. Iminophosphoranes, 2-[(N-arylamino)methyl-3-(triphenylphosphoranylidine)amino]thieno[2,3-b]pyridines, I (R = N:PPh3, R1 = CH:NPh, CH:NC6H4Me-4, CH:NC6H4OMe-4) react with isocvanates, carbon dioxide and carbon disulfide under mild conditions to give the functionalized 2,3-dihydropyrido[3',2':4,5]thieno[3,2-d]pyrimidines II [X = NR3, R2 = Ph, 4-MeC6H4, 4-MeOC6H4, R3 = Et, 4-C1C6H4, 4-FC6H4, 4-MeC6H4], and II (R2 = same, X = 0, S) resp.

157332-07-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with aromatic amines) RN 157332-07-5 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-formy1-4-phenyl-(CA INDEX NAME)

- IT 157332-09-7P 157332-15-5P 157332-16-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and reaction of, with heterocumulenes)
- RN 157332-09-7 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile,
 6-ethoxy-4-phenyl-2-[(phenylimino)methyl]-3[(triphenylphosphoranylidene)amino]- (CA INDEX NAME)

- RN 157332-15-5 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile, 6-ethoxy-2-[[(4-methylphenyl)imino]methyl]-4-phenyl-3-[(triphenylphosphoranylidene)amino]- (CA INDEX NAME)

- RN 157332-16-6 CAPLUS
- CN Thieno[2,3-b]pyridine-5-carbonitrile,
 6-ethoxy-2-[[(4-methoxyphenyl)imino]methyl]-4-phenyl-3[(triphenylphosphoranylidene)amino]- (CA INDEX NAME)

IT 157332-08-6P 157332-13-3P 157332-14-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and reaction of, with triphenylphosphine, iminophosphorane by)

RN 157332-08-6 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,

3-amino-6-ethoxy-4-phenyl-2-[(phenylimino)methyl]- (CA INDEX NAME)

RN 157332-13-3 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-[[(4-methylphenyl)imino]methyl]-4-phenyl- (CA INDEX NAME)

RN 157332-14-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6-ethoxy-2-[[(4-methoxyphenyl)imino]methyl]-4-phenyl- (CA INDEX NAME)

IT 157332-06-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reduction of)

RN 157332-06-4 CAPLUS

CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile, 3-amino-6-ethoxy-4-phenyl- (CA INDEX NAME)

L7 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:533999 CAPLUS

DOCUMENT NUMBER: 121:133999

ORIGINAL REFERENCE NO.: 121:24225a,24228a
TITLE: A synthesis of heterocyclic ring systems.

Pyrido[3',2':4,5]thieno[2,3-b]pyrrolizine and pyrido[6',5':4,5][3',2':4,5]dithieno[2,3:b':2,3-

b]dipyrrolizine

AUTHOR(S): Peinador, Carlos; Veiga, M. Carmen; Vilar, Juan;

Quintela, Jose M.

CORPORATE SOURCE: Fac. Ciencias, Univ. de La Coruna, La Coruna, E-15071,

Spain

SOURCE: Heterocycles (1994), 38(6), 1299-305 CODEN: HTCYAM; ISSN: 0385-5414

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 121:133999

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A synthesis for two new polycyclic heterocyclic ring systems is reported.

Cyclization of pyrrolidinocarboxamide derivs. of Et 3-(pyrrol-1-y1)thieno[2,3-b]pyridine-2-carboxylate I and Et

3,5-di(pyrrol-1-yl)dithieno[3',2'-e:2,3-b]pyridine-2,6-dicarboxylate II afford iminium salts that were transformed into the new title

heteropolycyclic compds. III and IV, resp.

IT 157139-72-5P 157139-73-6P 157139-74-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of pyridothienopyrrolizine derivative)

RN 157139-72-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,

3-amino-5-cvano-6-ethoxy-4-phenyl-, ethyl ester (CA INDEX NAME)

RN 157139-73-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 5-cyano-6-ethoxy-4-phenyl-3-(1H-pyrrol-1-yl)-, ethyl ester (CA INDEX NAME)

RN 157139-74-7 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 4-phenyl-6-(1-pyrrolidinyl)-2-(1-pyrrolidinylcarbonyl)-3-(1H-pyrrol-1-yl)-(CA INDEX NAME)

L7 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:169065 CAPLUS DOCUMENT NUMBER: 118:169065

ORIGINAL REFERENCE NO.: 118:29000h,29001a

TITLE: A convenient synthesis of some new pyrido[3',2':4,5]thieno[3,2-d]pyrimidine derivatives

with potential biological activity
AUTHOR(S): Peinador, Carlos; Ojea, Vicente; Quintela, Jose M.

CORPORATE SOURCE: Fac. Cienc., Univ. La Coruna, La Coruna, E-15071, Spain

SOURCE: Journal of Heterocyclic Chemistry (1992), 29(7),

1693-702 CODEN: JHTCAD: ISSN: 0022-152X

DOCUMENT TYPE: Journal LANGUAGE: English

LANGUAGE: English
OTHER SOURCE(S): CASREACT 118:169065

Ready, convenient synthesis of pyrido[3',2':4,5]thieno[3,2-d]pyrimdines I, II [R = C1CH2, (un) substituted Ph], and III [R = (un) substituted Ph, R1 = C1] from 2-chloro-3,5-dicyano-6-ethoxy-4-phenylpyridine via aminocarboxamide IV are reported. In addition, the reaction of III (R = 2-O2NC6H4, R1 = NHNH2) with reagents such as formic acid and tri-Et orthoformate yielded the fused tetraheterocyclic 8-cyano-9-ethoxy-5-(2'-nitrophenyl)-7-phenylpyrido[3',2':4,5]thieno[2,3-e]-1, 2, 4-triazolo[4, 3-c]pyrimidine. 146630-15-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (preparation and cyclocondensation of, with aldehydes,

pyridothienopyrimidines from) RN 146630-15-1 CAPLUS

CN

Thieno [2,3-b] pyridine-2-carboxamide, 3-amino-5-cyano-6-ethoxy-4-phenyl-(CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \text{NH}_2 & \text{O} \\ \text{NC} & \text{C} - \text{NH}_2 \\ \\ \text{EtO} & \text{N} & \text{S} \end{array}$$

ANSWER 30 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1992:407883 CAPLUS 117:7883

DOCUMENT NUMBER:

ORIGINAL REFERENCE NO .: 117:1595a,1598a Synthesis of new

TITLE:

pyrido[3',2':4,5]thieno[3,2-d]pyrimidines and pyrazolylpyridines

AUTHOR(S): CORPORATE SOURCE: SOURCE:

Mahgoub, S. A.; Badr, M. Z. A.; Abd El-Hafez, A. A. A. Fac. Sci., Assiut Univ., Assiut, Egypt Bulletin of the Faculty of Science, Assiut University

(1991), 20(2), 43-53

CODEN: BSAUDW; ISSN: 0366-4740

DOCUMENT TYPE: LANGUAGE: Journal English

GI

- AB A variety of title compds., including, I and II, were prepared from 3,5-dicyano-6-mercapto-4-phenylpyridin-2(IH)one (III, R = H). Thus, III (R = H) was treated with ClCH2CN and NaOAc in BtOH to give III (R = CH2CN) which cyclized in the presence of NaOEt to give aminodicyanophenylthienopyridinone IV. HCONH2 cyclocondensed with IV at 170° to give I.
- IT 141481-02-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
- (preparation and cyclocondensation of, of carbon disulfide or formamide)
- RN 141481-02-9 CAPLUS
- CN Thieno[2,3-b]pyridine-2,5-dicarbonitrile,
 3-amino-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)

L7 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER: 1991:471531 CAPLUS 115:71531

ORIGINAL REFERENCE NO.: TITLE:

115:12367a,12370a Synthesis and reactions of some new

thieno[2,3-b]pyridines and the antimicrobial effects Badr, M. Z. A.; Mahgoub, S. A.; Abdel-Latif, F. F.;

AUTHOR(S): Badr, M. Z. A.; Mahgoul El-Hafez, A. A. A. Abd

CORPORATE SOURCE: Fac. Sci., Assiut Univ., Assiut, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related

Elements (1991), 55(1-4), 175-83 CODEN: PSSLEC: ISSN: 1042-6507

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:71531

AB Mercaptopyridone I (R = H) was converted into a variety of products I (R = CH2COR1; R1 = OBt, NHNH2, NHNHAC, NHNHCONHPh, NHHCSNHPh, NHHCSNHPh, 3,5-dimethyl-1-pyrazolyl, NHN:CHR2, NHR3, Me, Ph, C6H4Br-4, C6H4Me-4; R2 = Ph, 4-MeCC6H4, 4-02NC6H4; R3 = Ph, 4-02NC6H4, 2-pyridyl) (II) by reactions with various electrophiles II (R1 = OBt, Me, NHR3, Ph, 4-BrC6H4, 4-MeC6H4) were cyclized with NaOMe in EtOH to give the title thienopyridines III. III (R1 = OBt) was converted to fused oxazine and pyrimidine derivs. IV (X = O, NH, NNH2, NN:CRC6H4NOZ-4). Selected II and III were tested for bactericidal and fungicidal activity.

T 135289-53-1P R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and bactericidal and fungicidal activity of)

RN 135289-53-1 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,

3-amino-5-cyano-6,7-dihydro-6-oxo-N,4-diphenyl- (CA INDEX NAME)

IT 135289-57-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclocondensation of, with acetic anhydride)

RN 135289-57-5 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,

3-amino-5-cvano-6,7-dihvdro-6-oxo-4-phenv1- (CA INDEX NAME)

IT 135289-54-2P 135289-55-3P 135289-56-4P 135289-68-8P 135289-69-9P 135289-70-2P 135320-36-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 135289-54-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,

2-acetyl-3-amino-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)

RN 135289-55-3 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3-amino-5-cyano-6,7-dihydro-N-(4-nitrophenyl)-6-oxo-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \text{NH}_2 \\ \text{NC} & & \\ & \text{NC} & \\ & \text{NC} & \\ & \text{N} & \\ & \text{NO}_2 \end{array}$$

RN 135289-56-4 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid, 5-cyano-3-(diacetylamino)-6,7-dihydro-6-oxo-4-phenyl-, ethyl ester (CA INDEX NAME)

RN 135289-68-8 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxamide,
3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl-N-2-pyridinyl- (CA INDEX NAME)

RN 135289-69-9 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-2-benzoyl-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)

RN 135289-70-2 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-2-(4-bromobenzoyl)-6,7-dihydro-6-oxo-4-phenyl- (CA INDEX NAME)

RN 135320-36-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-6,7-dihydro-2-(4-methylbenzoyl)-6-oxo-4-phenyl- (CA INDEX NAME)

IT 135289-52-0P

 ${\tt RL: RCT}$ (Reactant); ${\tt SPN}$ (Synthetic preparation); ${\tt PREP}$ (Preparation); ${\tt RACT}$ (Reactant or reagent)

(preparation, reactions, and bactericidal and fungicidal activity of)

135289-52-0 CAPLUS RN

Thieno[2,3-b]pyridine-2-carboxylic acid, CN

3-amino-5-cyano-6,7-dihydro-6-oxo-4-phenyl-, ethyl ester (CA INDEX NAME)

L7 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:235207 CAPLUS

DOCUMENT NUMBER: 112:235207 ORIGINAL REFERENCE NO.: 112:39673a,39676a

Novel synthesis of pyridin-2(1H)-thiones and TITLE:

thieno(2.3-b)pyridines: reaction of ethoxymethylenes

with activated nitriles

AUTHOR(S): Elgemeie, Galal Eldin Hamza; Ramiz, Mahmoud Mohamed

Mahfouz

CORPORATE SOURCE: Chem. Dep., Fac. Sci., Bani Suef, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related

Elements (1989), 46(1-2), 95-8 CODEN: PSSLEC; ISSN: 1042-6507

Journal

DOCUMENT TYPE: LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:235207

GI

RCOCR1:CHOEt (R = Ph, 4-MeOC6H4, Me; R1 = cyano, Ac, Bz, CO2Et) AB cyclocondensed with NCCH2CSNH2 to give 35-55% cyanopyridinethiones I. Alkylation of I with EtI-K2CO3 in DMF gave ethylthiopyridines II, whereas, treating I with PhCOCH2Br and K2CO3 in DMF gave 75-90% thienopyridines

127236-35-5P 127236-42-4P RL: SPN (Synthetic preparation); PREP (Preparation)

RN 127236-35-5 CAPLUS

(preparation of)

Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-2-benzoyl-4-phenyl- (CA INDEX NAME)

127236-42-4 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile, 3-amino-2-benzov1-4-(4-methoxyphenyl)- (CA INDEX NAME)

L7 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1987:4825 CAPLUS 106:4825 DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 106:907a,910a

TITLE:

Condensed pyridines. 4. Michael reaction in the synthesis of substituted 3-cyanopyridine-2(1H)-thiones AUTHOR(S): Sharanin, Yu. A.; Shestopalov, A. M.; Mortikov, V. Yu.; Melenchuk, S. N.; Promonenkov, V. K.; Zolotarev,

B. M.; Litvinov, V. P. CORPORATE SOURCE: Inst. Org. Khim., Moscow, USSR

SOURCE: Izvestiva Akademii Nauk SSSR, Seriva Khimicheskava (1986), (1), 153-9

CODEN: IASKA6: ISSN: 0002-3353

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 106:4825

- AB Condensation of 4-RC6H4CH:C(CN)2 with NCCH2CSNH2 or 4-RC6H4CH:C(CN)CSNH2 with CR2(CN)2 in the presence of Bt3N or piperidine gave (NC)2C:C(C6H4R-4)CH(CN)CSNH2 (R = H, Cl, F, Br) (all 4 prepared both ways). These condensed with ketones to give pyridinethiones I [R, Rl, R2 = H, H, Me; H, Me, Me, H, H, 4-FC6H4; F, Me, Me; Cl, Ac, Me; Br (RlR2 =) (CR2)41. Similarly prepared were pyridinethiones II (R, Rl = Cl, OH; Br, OH; Br, NH2).
- IT 105648-25-7P 105648-26-8P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
- RN 105648-25-7 CAPLUS
 CN Thieno[2,3-b]pyridine-5-carbonitrile,
 3-amino-2-benzoyl-4-(4-chlorophenyl)-6,7-dihydro-6-oxo- (CA INDEX NAME)

RN 105648-26-8 CAPLUS

CN Thieno[2,3-b]pyridine-5-carbonitrile,
3-amino-2-benzoyl-4-(4-bromophenyl)-6,7-dihydro-6-oxo- (CA INDEX NAME)

L7 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:437345 CAPLUS

DOCUMENT NUMBER: 103:37345 ORIGINAL REFERENCE NO.: 103:6055a,6058a

TITLE: Reactivity of heterocyclic compounds. V. Behavior of

6-alkoxy-2-amino-(or chloro)-4-aryl-3,5-dicyanopyridines in the presence of

nucleophiles

AUTHOR(S): Quintela, Jose Maria; Soto, Jose L.

CORPORATE SOURCE: Fac. Cienc. Quim., Univ. Complutense, Madrid, 28040, Spain

SOURCE: Anales de Quimica, Serie C: Quimica Organica y

Bioquimica (1984), 80(3), 268-72

CODEN: AOSBD6; ISSN: 0211-1357

DOCUMENT TYPE: Journal LANGUAGE:

Spanish

AB Methoxypyridine derivative I was treated with amines and Na alkoxides to yield II (R = substituted amino, alkoxy); diamines III (R1 = CH2CH2OH, Bu, PhCH2) were prepared from chloromethoxypyridine IV. I was stirred with HOCH2CH2NH2 24 h to give II (R = NHCH2CH2OH).

97124-98-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 97124-98-6 CAPLUS

CN Thieno[2,3-b]pyridine-2-carboxylic acid,

3-amino-5-cvano-6-methoxv-4-phenvl-, ethvl ester (CA INDEX NAME)

ANSWER 35 OF 35 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1984:174629 CAPLUS

DOCUMENT NUMBER: 100:174629

ORIGINAL REFERENCE NO.: 100:26557a,26560a

TITLE: Synthesis of heterocyclic compounds. XXXVII.

Preparation of

4,6-diary1-1,2-dihydro-2-thioxo-3,5-

pyridinedicarbonitriles and related compounds AUTHOR(S):

Rubio Encinas, Maria Jesus; Seoane, Carlos; Soto, Jose

CORPORATE SOURCE: Fac. Cienc. Quim., Univ. Complutense, Madrid, Spain SOURCE: Liebigs Annalen der Chemie (1984), (2), 213-22

CODEN: LACHDL; ISSN: 0170-2041

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 100:174629

- AB The reaction of NCCH2CSNH2 with α-benzoylcinnamonitriles
 4-RCSH4CH:C(CN)COPh (R = H, Me, MeO, Cl, NO2) in basic EtOH solution gave
 pyridinedicarbonitriles I and disulfides II. II reacted with HSCH2CH2OH
 to give I, which were reconverted to II by reaction with iodine-KI or
 Me2SO-73CCO2H. Methylation of I or II gave (methylthio)pyridines III. I
 (R = Ph) cyclocondensed with ClCH2CO2Et to give thieno[2,3-b]pyridine IV.
 II 89736-80-1P
- RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
- RN 89736-80-1 CAPLUS
- CN Thieno[2,3-b]pyridine-2-carboxylic acid, 3-amino-5-cyano-4,6-diphenyl-, methyl ester (CA INDEX NAME)

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